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A PROCESS MODEL OF FAMILY CONSUMER DECISIONS

by

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A THESIS
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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled A PROCESS MODEL OF FAMILY CONSUMER DECISIONS submitted by SUE L.MCGREGOR in partial fulfilment of the requirements for the degree of MASTER OF SCIENCE in CONSUMER STUDIES.

Betty Crown

Supervisor

Doris R Badir

Date Sept. 4, 1984

DEDICATION

This thesis is dedicated to my husband, Peter. His continual support and encouragement and his unwavering patience and love provided me with the initiative necessary to fulfill my dream of obtaining my Master's degree.

As he often reminded me, *"Something worth having, is worth working for"*.

ABSTRACT

A Family Model of the Consumer Decision Process

by

Sue L.McGregor

University of Alberta, 1984

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Much of family decision making centers on consumer behavior (Melson, 1980). However, the researchers in the disciplines of marketing and family sociology, who traditionally studied consumer decision making and family decision making, respectively, have not, to date, awarded the family consumer decision making process the attention it would seem to warrant. Thus, the objective of this research was to model the process that a family as a group goes through, while making a consumer decision. Both the intricacies of the variation in interaction that occurs between family members at different stages of the consumer decision and the effect of the immediate environment on these interactions were given special attention.

In summary, the domain of the model is restricted to the study of the *family* as a multiperson buying unit as it goes through the *seven stages of a high involvement, consumer* decision. The model is comprised of three major components and is pictorially represented in a nested cup scheme so as to illustrate the systems approach to conceptualizing the study of the family. The outer circle represents the *external environment* and is comprised of several sets of variables. Within this model, the external environment is viewed as affecting the decision process and family member involvement, with recognition that this latter influence is filtered through the *internal environment (family system)*.

The second circle depicts the *family as a system* and is referred to as the *internal environment*. It contains numerous sets of variables, several of which contain sub-concepts as well. These internal variables are viewed as individually or collectively having direct influence on the *core* of the model.

The inner *core* of the model is divided, with the left side depicting the seven stages of the decision process while the right side illustrates family member involvement at each stage. The stages of the decision process are a combination of the decision process component of the EKB model (Engel and Blackwell, 1982) and the concept of the problem solving loop from the Kieren, Vaines and Badir (1982) model. The core of the model is seen to be affected by the external and internal environments as well as by other variables within the core.

Definitions of the variables (approximately 120) are grouped according to the three components of the model. Propositions (approximately 250) are ordered into ten sets which in turn are organized according to external, family and process / product categories. A summary matrix supplements the extensive listing of propositions and provides a means of viewing all of the propositions simultaneously.

An expert review panel was established and a response sheet was developed, both for the purpose of reviewing and evaluating the model. Panel responses were discussed and the panel's recommendations were either incorporated into the current version of the model in Chapter II or are included in the final chapter as recommendations for future revisions and refinements of the model.

ACKNOWLEDGEMENTS

I would like to extend my sincere gratitude to Dr.Betty Crown, my senior advisor and professor. Her perseverance, encouragement and editorial assistance stimulated my interest in the topic of family consumer behavior. Her confidence in my ability to successfully develop this model provided me with the initiative necessary to complete this research.

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I. Introduction

A. Purpose and Problem Statement

The purpose of this research is to develop and refine a family oriented model of the *consumer* decision process. This will be done by taking a common problem which families often face - the purchase of a consumer good - and model or describe the problem solving process involved, identifying the internal, external and family member involvement variables which affect the process at each stage of the decision. Special attention is being directed to the identification of variables that influence variation in family member involvement during the stages of a consumer decision and to note any propositions that state the relationships between these variables.

B. Justification

Consumer behavior, defined as a study of those activities by which products and services are sought out, secured, used and evaluated (Melson, 1980:181), is a young, fast growing discipline built upon the theoretical foundations of more mature sciences. Principles from the fields of psychology, sociology, economics and cultural anthropology are used to shed light on the behaviors of individuals and families in their consumption related roles. An interest in why and how individuals make their consumer decisions has grown among marketers, family researchers, policy makers, home economists and other academics. These researchers have delved into the study of consumer behavior and their findings have provided insight into this most pervasive human activity. The field of *family* consumer behavior has also emerged as a new, intriguing field of inquiry. How to choose a consumer product or service has become a central family task - an all pervasive feature of individual and family life. A great deal of family decision making, which is a complex process, centers on consumer behavior (Melson, 1980:189).

The objective of family consumer behavior as a field of study is primarily to explain and understand how and why families behave as they do in the market place while going through this complex decision process. Achievement of this objective is the key to furthering the study of the family consumer decision making process (Kassarjian and Robertson, 1968). One of the limitations of previous work, that complicates future progress in family consumer behavior research, has been the over emphasis on the individual as the unit of analysis. Both of the streams of literature that have contributed to the understanding and analysis of consumer decision making - marketing and family sociology - have contributed to this over emphasis on the individual as the relevant unit of analysis. Granted, studies conducted by family sociologists were concerned with husband and wife joint behavior, but most of the researchers interviewed only the wife (Engel and Blackwell, 1982:183; Melson, 1980:132). Thus their methodology rather than their theorizing resulted in a lack of attention on the family as the unit of analysis.

This lopsided emphasis on the individual is said to occur for several reasons (Wind, 1978b; Davis, 1976):

1. there are conceptual difficulties involving the development of multiperson variables and hypotheses;
2. there are methodological difficulties involving the analysis of multiperson data;
3. there are operational difficulties involving added time and monetary costs for collection and analysis of multiperson data (Wind, 1978b);
4. there is a desire to avoid complicated role structure measures when two or more people are involved; and
5. there is a desire for comparability of research findings; therefore researchers continue to study individuals so as to ensure that their findings will be related to previous work on the individual.

Hansen, Munsinger, and Draper (1972), Wind (1976), Kassarjian (1981), Robertson and Zielinski (1981) and Gupta, Hagerty and Myers (1983) all posited that since the purchase behavior of individuals in the family is rarely done independently of the influence of others, it is desirable to change the unit of analysis in family consumer research from the individual to the family. Yet, these authorities claim that while marketers have recognized the importance of the family as a basic decision making unit engaged in consumption, marketers have not awarded the family decision making process the attention it would seem to warrant.

The family as a unit of analysis represents a sensible but complex way to view consumer decision making (Davis, 1976; Wind, 1978b). Granted, some marketing models recognize the social context and multiperson nature of most purchase behavior

(Engel and Blackwell, 1982; Sheth, 1974; Kenkel, 1961; Assael, 1981; Wind, 1978b). However, these same marketing models were developed upon some very limiting assumptions. It was assumed that in a multiperson family buying decision, the person involved in the purchasing act was the same person who went through the decision making process. They also assume that the family was acting *only* as a reference group exerting influence on the specific individual going through the process. Furthermore, any marketing studies that have recognized the family as the relevant decision making unit (Wind, 1978; Davis, 1974; Webb, 1978) saw the family decision making process as being either delegated to one family member for each purchase *or* as one person always making all the buying decisions for one particular product because there is a built in role prescription. Also, some studies imply consensus among family members regarding roles for a specific consumer decision (Engel and Blackwell, 1982: 174).

These marketing models cannot adequately account for the proposition that the family decision making process may be a unique experience for each buying decision. Home economists believe that families should strive to ensure effective problem solving while at the same time making a decision with the best interest of the family as a whole in mind. In order to do this, it is proposed that the unascribed goals, needs, resources, evaluative criteria, etc., of each individual are considered for each separate purchase decision. This approach is not sanctioned in the marketing literature. Furthermore, the narrow focus of the marketing models does not allow researchers to sufficiently account for variation in family member involvement during a consumer decision process. For example, some family members may not be involved in the decision at all; one member may be involved throughout the entire process;or different family members may be involved during different stages of the decision process (Stanton, Sommers and Barnes, 1977: 127).

Besides marketing, the additional contributing body of literature is family sociology (Engel and Blackwell, 1982: 174; Wind, 1978b). Although family sociologists do indeed study the family decision making process, they do so as a means of assessing family power and influence rather than specifically studying buying decisions. The main concern in the family sociology literature is with the relationship between the individual's possession of certain resources (power and influence) and the resultant outcome of the decision process, that is, who won (Safilios - Rothschild, 1970). In essence, family sociologists study the family decision process but, and a very significant "but", they do not assume a consumer perspective.[1]

Both the marketing literature and the family sociology literature have been concerned with studying the individuals within a family who did the decision making (Engel and Blackwell, 1982). However, it seems obvious that an individual level of analysis is not effective in capturing the dynamic interactions among family members (Wind, 1978b). Very often, family buying decisions are more appropriately described as group or joint decisions rather than as individual decisions (Melson, 1980: 132). Furthermore, the North American family has evolved into a system espousing democratic decision making (ie. those affected by the decision have influence in the process (Nickell, Rice and Tucker, 1976; Melson, 1980)). Hence, it seems logical to assert that the family should be seen as a multiperson buying unit composed of individual members in dynamic interaction (Wind, 1978b).

Hill (1984) proposed that the family as a system of interacting individuals and as a problem solving association, will receive added emphasis from family researchers in the future because propositional theories have been generated in these domains. This research proposes to meet the challenge of continued emphasis on family problem solving and interaction by developing such a propositional model directed towards explaining family consumer behavior. In this model, family buying behavior is seen as a complex, dynamic process rather than a single, individual act. Consequently, this proposed model of the family consumer decision process places the family at the core of the model. The focus is on the family as a decision making unit rather than on a single individual in the family. The intricacies of the interaction that occurs between family members at different stages of the decision process and the interaction between the family and their immediate environment during the family buying decision is the focal point of the model. In essence, the research culminates in the development of a model that attempts to explain family behavior during a consumer decision, with special attention on the variability in involvement of family members during the consumer decision.

---

[1] The reader is directed to the following references for a comprehensive review of the direction and focus of the family sociology literature. McDonald, G.W.(1980).Family power: The assessment of a decade of theory and research, 1970-1979. *Journal of Marriage and the Family*,42(4), 841-854.; Safilios - Rothschild,C. (1970). The study of family power structure: A review 1960-1969. *Journal of Marriage and the Family*, 32, 539-549.; Hill, R.L., & Scanzoni, J.(1982). An approach for assessing marital decision making process. *Journal of Marriage and the Family*,44,(4),927-941.

C. Objectives

The objectives of this research were as follows:

1. To study the literature on each of the following: theory development, problems related to theory development, current consumer behavior models, models of problem solving within a family system and group decision making.
2. To determine the influences on the family consumer decision process and more specifically, to identify both the internal, external and family member involvement variables that affect the process at each stage of the decision.
3. To develop a series of propositions related to the role of the family as a unit at each stage of the consumer decision process.
4. To classify these propositions by type according to their influence on the consumer decision process.
5. To define each variable such that its definition is consistent with its implied meaning in the proposition thereby contributing to the internal consistency of the model.
6. To develop and refine a pictorial representation of the concepts and relationships.
7. To select and contact "experts" in home economics, family studies and problem solving theory and establish a panel for the purpose of reviewing and refining the developing model, via a response sheet.
8. To incorporate comments of the panel members into a revision and refinement of the model *or* to note the recommendations for future revisions, which ever is most appropriate.

D. Organization of Thesis

The format for this thesis is:

1. introduction
2. model in current state
3. literature review
4. methodology
5. discussion
6. summary and recommendations.

In this thesis, instead of placing the results of the research *after* the literature review and the methodology, it seemed most appropriate to place the results (ie. the model in its current state) *before* the literature review. This format would enable the reader to view the model in its entirety, without the extraneous and extensive peripheral material, resulting in a clearer, uncluttered view of the components of a model of the family consumer decision process. A subsequent reading of the literature review , methodology, discussion, summary and recommendations will enlighten the reader as to the extensive process involved during the development of this model.

II. Model in Current State

This chapter will contain an extensive description of the current version of a model designed to explain how families behave while going through the stages of a consumer decision.[2]

A. Domain of Application

Before discussing the conceptual framework, defining the variables and noting the propositions, it is necessary to note the domain and scope of this model. The domain of a theory is the scope within which one is able to make true statements about both the variables and the relationships between those variables (Bennett, 1977).

There are several pertinent delimitations that have to be discussed in order to establish the domain of this model. First, it is imperative to realize that this theoretical effort is concerned with the *family* as a buying unit rather than the individual and if it is only one family member doing the deciding, his/her decisions are based on and have ramifications for the family as a whole (Melson, 1980:180). For example, family members will consider preferences of other family members besides themself (Melson, 1980:180); their choices are interdependent and interrelated (Davis, 1976:254); other purchases may have to be postponed or abandoned (Engel and Blackwell, 1982:155) and these decisions may affect the other family members' goals and preferences as well as overall family harmony.

Secondly, it is recognized that there are different types of families or multiperson buying units. Although this current focus suggests the husband/wife dyad or the parent/children dyad, it is not limited to these family types. It is posited that the reader will acknowledge that one has to start somewhere, and since the majority of the propositions and findings in the literature pertain to the husband/wife dyad, this seemed to be the most logical and appropriate juncture from which to launch this theoretical endeavor with confidence that in the future, propositions that pertain to other family types will be added so as to extend the domain of the model.

---

[2] This current version is a refinement of an earlier model that was reviewed by the members of an expert panel. The reader is directed to chapter IV for a description of the methodology involved in the development of the earlier version and to chapter V for an extensive discussion of the panel members remarks plus the justification for the inclusion or exclusion of their suggestions and criticisms into this current version.

A third significant aspect of this model is that it is concerned with *only* the family *consumer* decision process, ie. the purchase and use of a consumer good or service and the problem solving process the family goes through while making its decision.

A fourth issue concerns the demarcation of seven distinct stages in the consumer decision process. The author acknowledges that although the model outlines seven stages that constitute a rational consumer decision process, and although the major concern is with the more complex and important family purchases, not all consumer purchases entail or necessitate all seven stages. Instead, many family purchase situations, because they are familiar to others previously handled, call for skipping or compressing some steps together, a process that is accounted for by the inclusion of the problem solving loop (Kieren, Vaines and Badir, 1982). For example, if the family is considering the purchase of a carpet, appliance, car, furniture, or house (all high involvement decisions (see below)), and if they have previously purchased or compared alternatives relevant to this purchase, they may be able to avoid the necessity of going through the entire decision process. This model, if adequate, will be able to accommodate these types of family consumer decisions.

A final issue concerns high involvement decisions as explained by Engel and Blackwell (1982). The domain of the current *focus* is narrowed to high involvement decisions, discussed as extended problem solving by Howard and Sheth (1974). This author recognizes and incorporates the low involvement decision process into this model and agrees that in those instances not involving extended problem solving, most of the stages are skipped. Engel and Blackwell (1982) conceded that indeed, this rational problem solving process occurs only with a minority of product purchases. They acknowledged that most items are not sufficiently important to justify this kind of activity. However, of importance to this theoretical effort is the notion that at some point in their existence most families will, in all likelihood, engage in extended problem solving when making a consumer decision and this model is an attempt to explain that behavior.

B. Conceptual Framework

The most current version of the conceptual framework is depicted in Figures II.1, II.2 and II.3. The model is comprised of three major components:

1. external environment
2. internal environment (family system)
3. core: (a) decision process
   (b) family member involvement (at each stage).

A synopsis of each of the three components will offer an overview of the conceptual framework, prior to defining the variables and noting the propositions.

The model is schematically presented in a nested cup fashion so as to readily suggest the systems approach - one system operating within, being influenced by, and influencing the other systems. This scheme is consistent with Beckman, Boone and Kurtz (1979) and Bronfenbrenner's (1979) approach to conceptualizing the systems concept. Beckman et al. used the nested cup scheme to depict consumer buying behavior for the individual, but not the family. Bronfenbrenner utilized the nested cup scheme to conceptualize the ecosystem approach to studying the family. He used four levels of systems. He located the family in the innermost *micro system* within which the family members interacted. He demonstrated that the family is also a major linking unit in the next outer circle, the *meso system* of kinship, friendship, and neighbour networks (ie. market place, legal system, schools, etc.). The next outer layer is the *exosystem* made up of the economy, government, social class, reference groups, religion. The most removed system is the *macro system* at the level of culture, tradition, custom, world economy, etc.. The schema of this model is similar to Bronfenbrenner's approach. The aspects of the meso, exo and macro systems were combined and called the *external environment*. The micro system is still conceptualized as the *internal environment* within which the family interacts. The inner *core* of this model depicts family member involvement at the various stages of the consumer decision process.

The process of making a family consumer decision entails involvement of the family member(s) during the stages of the decision. Hence, the core of the model has been divided in half with a broken line so as to better illustrate the concept of family member involvement at each stage of the consumer decision. Each of these three systems will

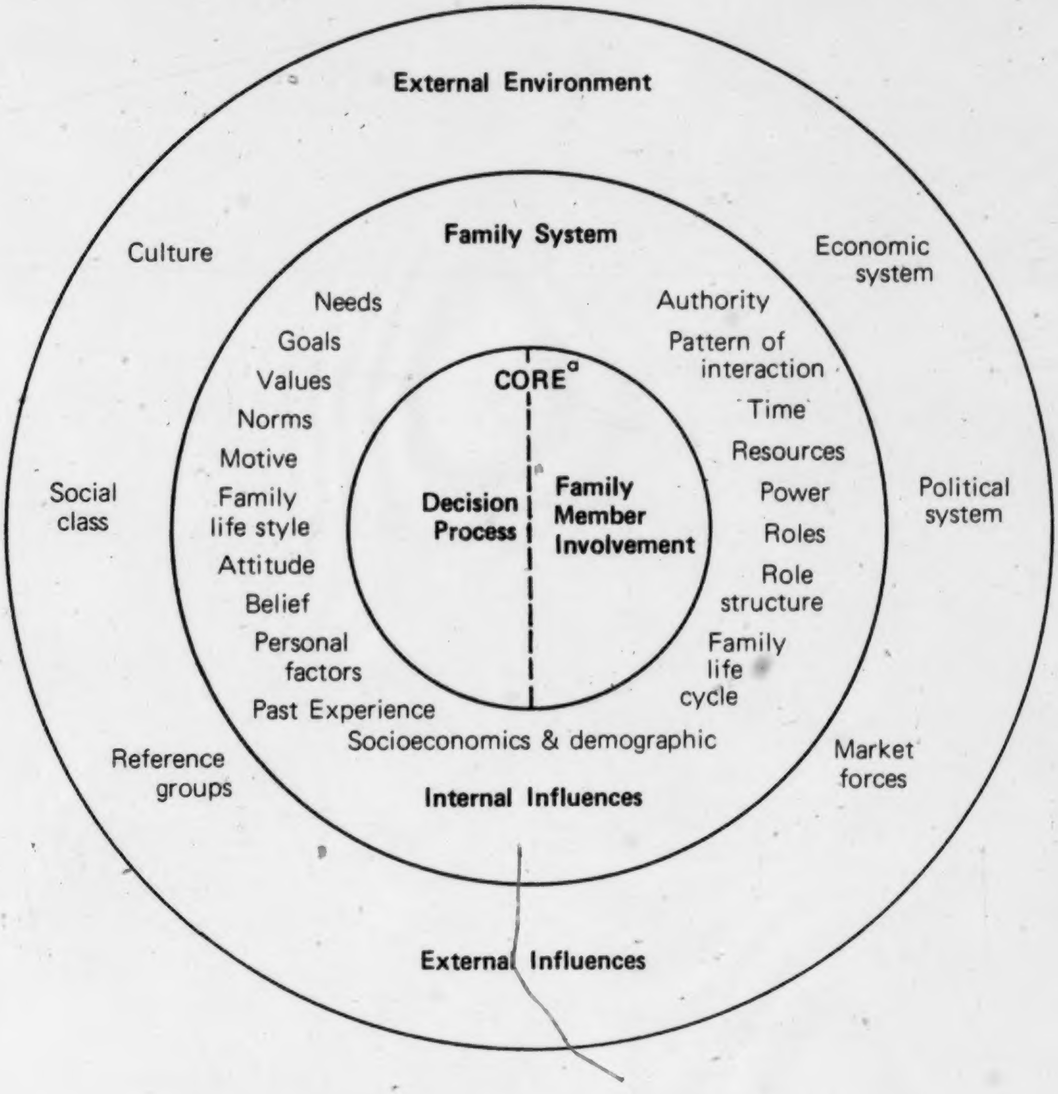

Figure II. 1

Major Components of a Process Model of Family Consumer Decisions: Current Version[a] now be discussed.

---

[a] See Figure 11.2 for expansion of the core and Figure 11.3 for the sets of propositions.

External Enviroment

An environment is "a combination of conditions that surround and affect the nature and quality of living of an individual or group" (Nickell, Rice and Tucker, 1976:459). Within this conceptual framework, the *external environment* is comprised of several sets of variables including culture, economic system, political system, market forces, social class and reference groups. This model contains no specific sets of propositions to account for the effect of the external environment on the family as a system. Although this may at first appear to be an oversight, it is in fact an attempt to make the model more specific. Of special interest to this research is an investigation of variation in family member involvement at each stage of the consumer decision process. Because there is such a large body of existing literature explaining the effect of the external variables on the internal family variables, it was decided that it was not fundamental that these relationships be expressly delineated. Instead, the focus is on the effects on family member involvement, recognizing the indirect effect of the external variables. In other words, the external environment acts as a screen or filter between the external environment (Engel and Blackwell, 1982) and the right side of the core of the model. For example, the economic system (external), in addition to directly affecting the decision process, may affect employment status (internal) which in turn influences family member involvement during stages of the decision process (core).

Internal Environment - Family system

The *internal environment* in essence, depicts the *family system* operating within the larger external environment (system). The sets of internal variables depicted in the model (Figure II.1) all contribute to shaping the character of the family system. The family is perceived as being comprised of interdependent *individuals* who, while maintaining their unique personalities, still manage to function as a group by reaching consensus on family related goals, values, norms, motives, and role structures. Furthermore, interaction patterns usually evolve enabling the individual members to function in a healthy, productive, multiperson atmosphere with viable means of resolving conflict and maintaining communication between members. Individual members will have their own experiences and reference groups, yet may still share family experiences and social reference groups. These same individuals may also possess their own resources and as a result of these individual resources plus individual interests, opinions and attitudes, different family life styles evolve. The socioeconomic and demographic characteristics of each family will set it apart from other family systems. In summary, a merger of all of these internal family variables will result in a unique family system. By accounting for all of these sets of internal variables, this model attempts to offer an explanation of why there is variation within each unique family and among families during a family decision for a consumer good or service.

These internal variables are seen as individually or collectively having direct influence on the core of the model, ie. during various stages of the decision process and on the involvement of family members during the consumer decision.

Decision Process

The left side of the core (Figure II.2) concerns the consumer decision process which is presented in seven distinct stages, each of which affects other stages of the decision process and family member involvement and may itself be affected by a) external environment, b) the internal family system, c) the other stages of the process, d) the product, and e) family member involvement. Although the consumer decision process is schematically presented in a linear fashion, it is recognized that there may be an overlapping, condensing or an omission of steps and that the decision may indeed not occur in the sequence depicted in the model. The concept of the problem solving loop (Kieren, Vaines and Badir, 1982: 143) aids in accounting for this reality.

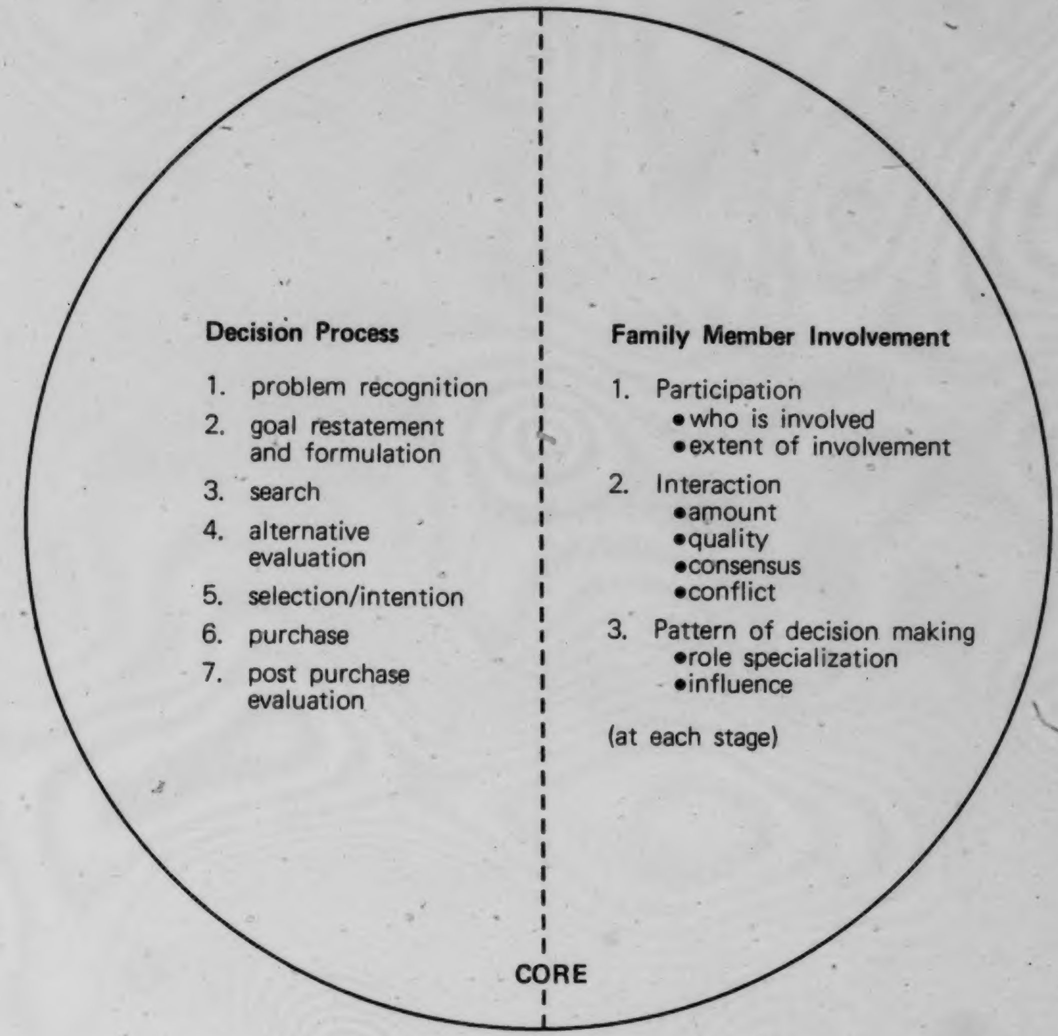

Figure II.2

Expansion of Core of Process Model of Family Consumer Decisions

Family Member Involvement

The right side of the core concerns the concept of family member involvement during a consumer decision (Figure II.2). This concept refers to 1) who participates in the specific consumer decision and the extent of each person's involvement, 2) the interaction incurred during the process of deciding, and 3) the patterns of decision making utilized to reach the decision (ie. role specialization and influence). Family member involvement at any stage may be affected by a) the external environment, b) the family system, c) some aspects of the consumer decision process, d) the product, and/or e) family member involvement at another stage.

C. Definitions of the Variables

Concepts and variables embody the important ideas of a field of study. But, a researcher cannot deal with complex concepts (ie. state propositional relationships between them) until they are analyzed and the component parts are identified and defined. Therefore, theory development usually begins with definitions of the variables (Compton and Hall, 1972; Bennett, 1977:5; Winakor, 1979). Writing definitions enables the researcher to convey the meaning to be expressed for the specific situations in which the problem is to be studied. Compton and Hall explained that variable definitions should be stated in such a way as to give the reader a concise and complete understanding of the concept. Compton and Hall also explained that definitions serve two purposes: to explain the meaning of a concept that might not be clearly understood otherwise, and to restrict a concept that has more than one meaning. According to Compton and Hall (1972:49), a good definition fulfills the following criteria:

1. it gives the essence of that which is being defined;
2. it refers to the attributes possessed by, rather than those lacking in, the object being defined;
3. it contains the elements that are essential characteristics of what is being defined, but eliminates superfluous factors;
4. it is expressed in clear and direct language rather than in obscure or figurative terms;
5. the subject of the definition and the defining clause are reversible; and,
6. the defining clause contains words whose meaning is clearer than the word that is

being defined, and it does not contain the word that is being defined.

At this stage of the research, the variables will be defined in terms of the *general meaning* they are intended to convey. A subsequent task would be that of operationally defining the variables. This operational definition would be necessary to identify the instructions used to measure the variable. Although a mandatory step in theory development, the operational definitions of the variables will not be undertaken at this time. Instead, the more fundamental task of assigning general meanings to the variables will be the paramount concern at this stage of the model development.

Germane to the task of defining or ordering the variables is the necessity of organizing them in some manageable and meaningful system. A logical and expedient means of schematically organizing the variables was to order them according to the three components of the model. Consequently, there is an inventory of variables (Table II. 1) for a) the external environment, b) the family system, and c) the core of the model. The latter is further subdivided into a) the decision process, b) product related variables, and c) fmily member involvement variables.

The variables in this inventory are defined in the following section. The definitions were procured from extensive reviews of the consumer behavior, marketing and the family studies literature. Each definition is fully documented except for the few that were not defined in the literature. Those few were defined by the researcher. All attempts were made to fulfill the criteria set out by Compton and Hall (1972) when defining variables thereby ensuring clear, unambiguous definitions. Any variable that is defined is present in one or more of the propositions. In each definition, the variables are italized. They are grouped according to the three components of the model and are presented alphabetically or in a temporal sesquence. When a variable is indented, that indicates that it is considered a subconcept or related concept of the unindented variable prior to it. For example, in the external variables, *number of alternatives available* is indented because it is a subconcept of *market forces*. A full listing is shown in Table II. 1.

TABLE II.1 INVENTORY OF VARIABLES

EXTERNAL	INTERNAL	PROCESS	PRODUCT RELATED	FAMILY MEMBER INVOLVEMENT
culture	attitude	problem recognition	amount of information	participation/involvement
economic system	authority	family goal restatement and formulation:	attribute sub-decision	interaction:
market forces	belief	- family goal complex	complexity of alternative	- cooperation
- number of alternatives	goals	- family goal setting	depletion of previous solution	- positive/negative reactions
- information accessibility	patterns of interaction	- goal effectuation	importance of decision	- conflict
- special opportunity	family life cycle	- goal oriented behavior	interpurchase time	- conflict resolution:
- perceived cost/ benefit of search	family life style	- resource assessment	irrevocable action	.bargaining
- perceived value of search	motives	- level of aspiration	length of commitment	.persuasion
- perceived cost of search	needs	search	perceived similarity between alternatives	.negotiations
- unanticipated circumstances	norms	- internal search	perceived risk	- consensus
political system	past experience	- external search	uncertainty	pattern of decision making
reference groups	personal factors	- extent of search	unique feature	- autonomic
social class	- ability to recall information	- information sources		- syncratic
	- attitude towards shopping	- information processing		- husband dominated
	- confidence in decision making	alternative evaluation		- wife dominated
	- distolerance	- evaluative criteria		- democratic
	- perception	- changes in criteria		- egalitarian
	- propensity to search	- beliefs		- traditional
	- quantity and quality of stored information	- attitude		role specialization
	- recency of decision	- satisficing rule		influence
	- risk capital	- extent of alternative evaluation		influence strategy mix
	- sex role attitude	- choice heuristics		dominance
	- vanity/modesty bias	.compensatory choice heuristic		
	power	.noncompensatory choice heuristic		
	resources	selection/intention		
	- comparative resource	purchase		
	- financial status	post purchase evaluation		
	- time pressure	- expectation		
	- interaction resources	- dissonance		
	.adaptability	- satisfaction/ dissatisfaction		
	.affective involvement			
	.connectedness			
	.family congruence			
	.empathy			
	.flexibility			
	.group cohesiveness			
	.intimacy			
	roles			
	- family financial officer			
	role structure			
	socioeconomics and demographics			
	time			
	values			

External Variables

Culture - the total characteristic, distinctive way of life and learned behaviors of a society that provide boundaries (norms) within which most individuals think and act. (Linton, 1981:489). These components of social heritage are shared and transmitted by the members of a particular society (Kassarjian and Robertson, 1981:478).

Economic system - the segment of the external environment that deals with the production, distribution and consumption of goods and services through the management of resources.

Market forces - an influence from trade or economic activity or from marketing efforts (eg. advertising) that affects consumer behavior in the marketplace, resulting in influence on the purchase decisions for products and services.

Number of alternatives available - the number of product or service alternatives available to the consumer for consideration at any given point in the decision process, but especially during alternative evaluation (Punj and Stewart, 1983: 188).

Information accessability - the degree of ease of obtaining necessary, relevant information pertinent to a product decision (Punj and Stewart, 1983: 186).

Special opportunities: Situational factor - unique, non-regular state of affairs or favorable combination of circumstances (ie. chance or luck) that is favorable (for example: a sale, a deal, or a limited in-store offer).

Perceived cost/benefit of search - the individuals's perception of whether the benefits resulting from obtaining more relevant information outweigh the costs entailed in the search process (Engel and Blackwell, 1982:326).

Perceived value of search - the consumer's beliefs about the benefits to be gained from an external search for information (Engel and Blackwell, 1982:324).

Perceived costs of search - the individual's perception of the costs that must be incurred both to collect and process the information. These costs include time, money, effort, delay in decision, information overload, frustration, etc. (Engel and Blackwell, 1982:327).

Unanticipated circumstances: Situational factor - an unexpected change at the time of purchase (Engel and Blackwell, 1982:687). These include changes in physical store surroundings (eg. sounds, light or decor), social sorroundings (friends), changes in purpose of purchase, temporal perspective (eg. time of day, time pressure), and also the actual antecedent state (eg. mood, cash on hand, health that day, etc.) (Kakkar and Lutz, 1980:211; Belk, 1975:159).

Political system - the prevailing atmosphere of governmental activity, especially a) the competition between groups or individuals for power or leadership and b) the institutions, laws and customs that govern the people.

Reference group - a device the family uses to ensure compliance with norms in a society. It is the type of group, person or institute that the family or individual family members use as a point of reference in determining their own judgements, preferences , beliefs and behaviors (Bennett and Kassarjian, 1972:103). Reference groups serve two functions - they are a source of pressure for people to conform to similar patterns (normative compliance) and they provide a reference point or yard stick by which people evaluate their behavior relative to others (comparative function) (Engel and Blackwell, 1982:144). Finally, reference groups have the role of transmitting the influence of larger cultural and social class groups to the family or its individual members (Ward and Robertson, 1973:242).

Social class - relatively permanent and homogenous divisions in a society in which individuals or families, sharing similar values, life styles, attitudes, interests and behavior can be categorized (Engel and Blackwell, 1982:111).

Internal Variables

Attitude - a cumulative negative or positive evaluation of the consequences of buying or using a product or service which has certain believed characteristics or attributes (Engel and Blackwell, 1982:28; Loudon and Della Bitta, 1979:33).

Authority - the prescribed right ,based on cultural and/or social expectations or norms

(Safilios-Rothschild, 1970:540; Heffring, 1979:494), or the recognized right resulting from spousal agreement (Burns, 1976; Burns and Granbois, 1977:78), for a family member to make decisions for the family as a whole (Nickell, Rice and Tucker, 1976:457).

Belief - the things a person "knows" to be true from his point of view (Bennett and Kassarjian, 1972:76), consisting of facts about something as they see them at a given point in time (Loudon and Della Bitta, 1979:33). Beliefs represent the consumer's estimation of the degree to which an alternative posseses a specific, desired attribute (Engel and Blackwell, 1982:445).

Goals - are definite, tangible ends or purposes that individuals [or families with goal consensus] are willing to work to accomplish or reach (Nickell and Dorsey, 1968:50).

Patterns of interactions - the mutual or reciprocal actions or communication systems between family members that involves initiative and responsive behavior.

Family life cycle - the orderly and predictable progression of family development over its life span, demarcated by several sequential stages(Runyon, 1977:149). Each stage is characterized by unique needs, different patterns of object accumulation, different demands on family resources, changes in earning power, changes in family role organization, changes in age compositions and differing social perception of the family as they change (Arndt, 1978:128; Hill, 1984:13).

Family life style - the distinctive, enduring manner in which individuals [within a family] allocate their time in terms of work, leisure and consumption (Wells, 1974), thereby reflecting their interests and values (Assael, 1981:233) and their attitudes and opinions of themselves and the world around them (Engel and Blackwell, 1982:687).

Motives - an enduring predisposition containing both an arousing and directing function, to strive to attain specified goals (Bettman, 1979:18). That is, motives influence the amount of energy allocated to a particular activity and serve as a directive, affecting choice of one behavior or alternative over another (Engel and Blackwell, 1982:688).

Needs - are a state of circumstances requiring something to fill the void. They are universal, biologically based motivations that are not limited to one culture and do change through time (Maslow, 1954:122). A need implies that one can get what one must get (Nickell, Rice and Tucker, 1976:33).

Norms - are stable rules or expectations held by a consensus of a group that specify, prohibit or govern certain behaviors in specific situations. The norms of the larger social system are filtered through and interpreted by individuals in a family setting (Kieren, Henton and Marotz, 1975:19; Engel and Blackwell, 1982:73, 155).

Past experience - the frequency with which the [family or] individual [members] have encountered the same or similar product decision in the past, resulting in gained knowledge relevant to that product [or to the general process of making decisions as a group]. Past experience can be on three levels - recency of decision, quality of outcome (satisfaction/dissatisfaction) and quantity of similar or related experiences (Punj and Stewart, 1983:188).

Personal factors

Personality - the consistent responses of an individual to environmental stimuli. These responses result in general patterns of behavior that are characterized by a distinguishable, relatively enduring way in which one individual differs from another (Engel and Blackwell, 1982:216).

Ability to recall information - the ability of the individual [family member] to recall stored information relevant to a specific purchase through an internal search (Engel and Blackwell, 1982:325).

Attitude toward shopping - an individual [family member's] negative or positive evaluation of the act of shopping (Loudon and Della Bitta, 1979:33).

Confidence in decision making - the individual [family member's] faith in his/her ability to make a correct selection and evaluation of the alternatives (Engel and Blackwell, 1982:326).

Distolerance - being beyond the capacity to endure a state of affairs contradictory to or inconsistent with one's expectations or regular practices (Loudon and Della Bitta, 1979:518).

Perception - involves an unconscious selection of relevant aspects of the stimuli from the market place so as to produce a coherent order to the multiple sources of stimulation (Melson, 1980:185).

Propensity to search - the likelihood that an individual [family member] will engage in or prefer to engage in a search, relative to the other [family members] (Engel and Blackwell, 1982:329).

Quantity and quality of existing (stored) information - the individual [family member's] number of perceived similar purchases previous to this decision coupled with the appropriateness of this stored information relevant to the purchase at hand (Engel and Blackwell, 1982:324 (see past experience)).

Recency of decision - the amount of time that has elapsed since the individual family members has used the stored information that they previously used to make a similar decision (see past experience).

Risk capital - the amount of resources or emotional wealth that a person perceives he / she has to risk. For example, if an individual looks upon his / her cash and credit reserve as a resource to be used rather than hoarded and if that person feels confident that any emergency can be handled by future incomes, his / her risk capital is high with the opposite being true if s / he believes that cash resources must be saved and carefully managed (Kerby, 1975: 133).

Sex role attitude - a concept that distinguishes between an individual's traditional (sex differentiated) and modern (undifferentiated) attitudes towards roles for both males and females (Rosen and Granbois, 1983:254. This is also referred to as sex-role or sex-role orientation (Qualls, 1981:267), and sex-role preferences (Scanzoni and Fox, 1980:744)).

Vanity / modesty bias - either spouse's overestimation of the other's influence (modesty) or overestimation of his / her own influence (vanity) in a decision (Davis and Rigaux, 1974: 58; Bonfield, 1978:304).

Power - the ability and potential of a family member to influence or control the outcome of a conflict decision even in the face of opposition and resistance from others (Macdonald, 1980:842: Safilios-Rothschild, 1970:540; Nickell, Rice and Tucker, 1976: 462).

Resources - the means which are available to the family to enable it to achieve family goals (Kieren, Vaines and Badir, 1982: 138). These include personal resources possessed by an individual, interpersonal resources allowing interaction with family members and material resources at the family's disposal (Kieren, Henton and Marotz, 1975: 13; Gross et al., 1973: 165).

Comparative resources - the resources that the husband and wife bring with them to a marriage (Davis, 1976:250). Each partner possesses these resources in varying degrees and they are exchanged for the right to make or not to make decisions or to participate or not participate in the family activities (Spiro, 1983:394).

Financial status - the quantity of funds available or expected to be available to spend on goods and services during some specified time period (Engel and Blackwell, 1982:681).

Time pressure (limited resource) - the extent to which a decision must be made within a time period less than that period required for optimal decision making (Punj and Stewart, 1983:184; Engel and Blackwell, 1982:681).

Interaction resources

Adaptability - the ability of family members to adjust to changing conditions with a minimum of friction (Kieren, Henton and Marotz, 1975:11).

Affective involvement - each spouse's perception of his/her satisfaction with their shared companionship (Hill and Scanzoni, 1982:935).

Connectedness - whether or not the husband or wife have the same friends and interests (Jenkins, 1979:207).

Empathy - the ability to interpret the behavior of another person and to be able to relate this understanding to the specific situation and to the others behavior in that situation (Kieren, Henton and Marotz, 1975:11).

Family congruence - the degree to which family members have knowledge of and agree with the role expectations the other members of the family may have for them. (Heffring, 1979:495; Hansen et al, 1972:398).

Flexibility - the ability to maintain a sufficiently broad range of possible responses so that a family member does not respond to different situations in the same way (Kieren, Henton and Marotz, 1975:11).

Group cohesiveness - a spirit or esprit de corps within a group that develops fairly spontaneously among members who interact frequently and share common goals (Whitney and Smith, 1983:167).

Intimacy - the degree to which family members are familiar with the preferences of the other members and know their probable reaction under widely different circumstances (Wind, 1978b:660).

Roles - are either a set of expectations people (significant others) have about required behaviors or the actual behavior engaged in by the person (role performance) (Applbaum et al, 1979:138). A role refers to the many positions a person occupies and the variety of behaviors tied to each of them (Heffring, 1979:493).

Family financial officer - is the individual [or team] that carries out the main responsibility for the family finances from the point of both decision making and execution of bill payment and budgeting (Ferber and Lee, 1974:44).

Role structure - the combination of behaviors assumed by the individual family members resulting in an overall organization of unwritten rules about specific, appropriate behavior for certain situations (Melson, 1980:263) (This concept is utilized by, but not generally defined by, such researchers as Davis and Rigaux, 1974; Granbois, 1971; Woodside, 1972; Shuptrine and Samuleson, 1976; Hemple, 1975; Ferber and Lee, 1974; Rosen and Granbois, 1983).

Socio-economics and demographics - the characteristics of a family, with special emphasis on the economic and social traits that mark or set a family apart from other families. These traits include income, occupational status, size and age of family, family composition, geographic location, education, residence, mobility, etc. (Paolucci, Hall and Axinn, 1977:35).

Time - the duration of the interval when activities occur. Clock time is constant in amount for all persons. Biological and psychological time vary from person to person and even differ within a person from one period of life to another (Nickell, Rice and Tucker, 1976:36).

Values - interchangeable beliefs of what is desireable. They are group norms which have been internalized by individuals, often with modifications by that individual (Engel, Kollat and Blackwell, 1968:63). Individual values may become shared family values.

Core Variables - Decision Process

PROBLEM RECOGNITION -a perceived difference concerning consumer goods and services, between the ideal, desired state of affairs and the actual situation, sufficient to arouse and activate the decision process (Engel and Blackwell, 1982:301). In this context a *family problem* is any situation involving an unachieved but potentially attainable goal, which threatens the family's values, or those of one of its members. This requires a cognitive effort on the part of one or more of the family members and interaction among the members so as to resolve the situation (with a feasible means that is not always immediately apparent) in a manner commensurate with family values (Aldous, 1971:269; Klein and Hill, 1974:495; Kieren, Henton and Marotz, 1975:7).

FAMILY GOAL RESTATEMENT AND FORMULATION - a comparison of satisfactions derived from several goals (Gross et al, 1973:280) that involves reestablishment of priorities and relative weight of each goal to the other and results in direction and more precise guidelines for evaluating behavior (Kieren, Vaines and Badir, 1982:136).

Family goal complex - is a result of goal setting activity and is defined as a dynamic, responsive hierarchial structure of goal preferences that is in a constant state of flux yet at any given time represents the overall state of being in which the family would like to be located at any given time in its life cycle (Edwards, 1970:653; Gross et al., 1973:282).

Family goal setting - a continual, complex process throughout the life of the family that invloves constant weighing of values and changing of attitudes and constant weighing of decisions about relative priority of one goal to another goal (Edwards, 1970:653; Nickell and Dorsey, 1968:50).

Goal effectuation - the process through which the family goal complex is transformed into reality. It involves decision making regarding economics, the best way to achieve the end and how to enlist and maintain individual participation required for achievement of group goals. The process also calls for developing and establishing leader roles and worker roles so as to be able to administer family member participation while achieving the goals (Edwards, 1970:654).

Goal oriented behavior - the act of setting goals for the family system, the determination of means by which goals will be achieved and the development and allocation of resources to be invested in goal achievement. It also includes the securing and maintaining of support and cooperation from family members for system goal attainment (Edwards, 1970:652).

Resource assessment - the gathering and assembling of family resources intended to be used to solve the problem. It involves decision about how the family's exisiting stock of resources can be increased and/or efficiently allocated among competing goals (Edwards, 1970:654; Kieren, Vaines and Badir, 1982:138; Melson, 1980:182).

Level of aspiration - a family's desire or urge to achieve a goal or objective (Gross, Crandall and Knoll, 1973:248).

SEARCH - occurs when the existing information, beliefs and attitudes are inadequate, resulting in motivated exposure to and acquisition of available, [accessible] information and knowledge with regard to given alternatives, so as to formulate possible courses of action (Engel and Blackwell, 1982:321; Engel, Kollat and Blackwell, 1968:48-49).

Internal search - a memory scan of the exisiting stored information to determine whether or not enough is known about alternatives to permit some kind of choice (Engel and Blackwell, 1982:26).

External search - a motivated and completely voluntary decision to seek new information, making use of a variety of information sources. It occurs because the memory scan proved inadequate. It is terminated when it is believed that adequate information has been procured or when the costs of additional search are seen to outweigh the gains (Engel and Blackwell, 1982:26, 323; Engel Kollat, and Blackwell, 1968:48-49).

Extent of search - the range, scope or magnitude of activities over which the search process extends (Davis and Rigaux, 1974:52).

Information sources - the various and numerous mediums or agents that contain, provide access to or distribute data pertinent to the alternatives, to the person seeking knowledge about a product or service (Punj and Stewart, 1983:184). These include personal sources, commercial sources (eg. radios, T.V., video, magazines, newspapers, billboards, packages, salespersons, etc.), experimental sources (trial use), and public sources (consumer rating organizations, or government agencies) (Engel and Blackwell, 1982:347; Kotler, 1980:253).

Information processing - refers to how people process incoming information and consists of the consumer's selective exposure, attention, comprehension, yielding / acceptance and retention of product information from the marketing and non-marketing sources (Engel and Blackwell, 1982).

ALTERNATIVE EVALUATION - the processes that the consumer uses to compare the characteristics of alternatives against his / her evaluative criteria (such as price, color, price / quality relationship, reputation, performance, size, image, maintenance, etc.) and culminates in the production of acceptable and unacceptable alternatives (Engel and Blackwell, 1982:418; Engel, Kollat and Blackwell, 1968:423, 431).

Evaluative criteria - the preferred specifications and standards used to evaluate and compare products and services. They are the physical product attributes as well as the subjective, symbollic attributes that are considered to be important in the purchase decision (Loudon and Della Bitta, 1979:33; Engel and Blackwell, 1982:27, 415).

Changes in evaluative criteria - the alteration or modification of the evaluative criteria either as a result of an emergence of new or the disappearance of original evaluative criteria at later stages of the decison process (Park and Lutz , 1982:108).

Beliefs - the things a person "knows" to be true from his / her point of view, consisting of facts about something as s / he sees them at a given point in time (Bennett and Kassarjian, 1972:76). Beliefs represent the consumer's estimation of the degree to which an alternative possess a specific, desired attribute (Engel and Blackwell, 1982:445; Loudon and Della Bitta, 1979:33).

Attitude - a cumulative negative or positive evaluation of the consequences of buying or using a product or service which has certain believed attributes (Engel and Blackwell, 1982:28).

Satisficing rule - an acceptance of the first alternative that satisfies minimum expectations of the evaluative criteria (Davis, 1976:249). It is the process of selecting a reasonable, but not necessarily best, alternative (Nickell, Rice and Tucker, 1976: 464).

Extent of alternative evaluation - the range, scope or magnitude of activities over which the process of comparing and evaluating alternatives extends.

Choice heuristics - rules of thumb (stored in memory) that are used when people compare product characteristics against the evaluative criteria during the process of alternative evaluation (Bettman, 1979).

Compensatory choice heuristics - these rules are based on the premise that some kind of weighing or similar calculation is carried out when more than one criteria is involved. These rules assume that a perceived weakness on one attribute may be compensated for by the strengths of others (Bettman, 1979: 179; Hansen, 1976: 132).

Noncompensatory choice heuristics - these rules are based on the assumption that weaknesses in one attribute are not compensated for by the strength of another. Instead, consumers look for alternatives that are satisfactory on all or some determinant attribute or choose the first alternative that satisfied minimum expectations of all family members (Bettman, 1979: 180; Hansen, 1976: 133; Davis, 1976:250).

SELECTION/INTENTION - selection is defined as a choice, from among the most promising alternatives, of the alternative that will result in the greatest number of unwanted consequences (Nickell and Dorsey, 1968:64). Intention is the subjective, verbally stated, prepurchase probability, made in cognizance of possible extenuating factors, that the selected alternative will be purchased (Engel and Blackwell, 1982:45, 679).

PURCHASE - the point at which the family has paid for a product or service, or made a financial committment to do so, followed by taking delivery of that product or service (Kerby, 1975: 129; Howard, 1977:31).

POST PURCHASE EVALUATION - post decision assessment of the degree to which need was satisfied by the alternative selected and purchased (Kerby, 1975: 159) or the degree of doubt (dissonance) regarding the alternative selected and purchased (Engel and Blackwell, 1982:505).

Expectation - a subjective anticipation or perception of how the product or service will perform or satisfy after the act of purchase (Cohen, 1981:414).

Satisfaction/dissatisfaction - is a result of a comparison of the consequences of a purchase with the expectations regarding the purchase and is defined as evaluation and (dis)confirmation that the chosen alternative is (in)consistent with prior beliefs and expectations with respect to the alternative (Engel and Blackwell, 1982:501; Cohen, 1981:413).

Dissonance - post-puchase doubt that occurs as a result of a discrepancy between a consumer's decision and prior expectations. It is motivated by awareness that one alternative was purchased, yet there is existence of contradictory beliefs that the unchosen alternative also had desireable attributes and the consumer is not convinced that s/he have made the right decision (Engel and Blackwell, 1982:505; Festinger, 1957:3; Ward and Robertson, 1973:409).

Core Variables - Product Related

Amount of information needed -the individual's perception of how much product information is required prior to selection of an alternative in order to make a wise and low risk selection.

Attribute sub-decision -the presence of competing multiple decisions on numerous criteria for each alternative (Engel and Blackwell, 1982:326).

Complexity of alternative - the number of features possessed by an alternative about which information is available to the consumer during the decision process (Punj and Stewart, 1983:184).

Depletion of previous solution - a reduction in quantity or quality of a prior product or service sufficient to warrant repletion or replacement.

Importance of decision - the relative intensity of motives governing the buyer activity related to the given product or service relative to others (Engel and Blackwell, 1982:681).

Interpurchase time - the amount of time that has elapsed between a prior, similar purchase and the present purchase (Engel and Blackwell, 1982:325).

Irrevocable action - an unalterable purchase (Engel and Blackwell, 1982).

Length of committment -the period that the consumer is committed to the use of the product or service after s/he have purchased it (Katona and Mueller, 1955: 50)

Perceived similarity between alternatives - the discernable resemblence among alternatives and features of a product or service.

Perceived risk - the uneasiness or fear that an incorrect decision will be made (Engel and Blackwell, 1982:325). It is the consumer's perception of the consequences of a wrong decision coupled with the uncertainty of whether the product or service will live up to expectations (Sternthal and Craig, 1982:143).

Uncertainty - the degree to which choice of alternatives can be determined to be correct or optimal by the consumer prior to selection of an alternative (Punj and Stewart, 1983:184).

Unique feature - a distinctively unmatched characteristic or attribute of an alternative to be considered during alternative evaluation.

Core Variables - Family Member Involvement

Participation -the specific individual family member(s) actually involved in the current consumer decision and the degree to which individual members of a family apply time and effort to the purchase decision process (Wind, 1978b:660; Burns, 1976:52).

Interactions - the mutual or reciprocal actions or communication system between family members that involves iniatitive and responsive behavior.

Cooperation -the degree of contribution to or resistance to the resolution of a problem (Hill and Scanzoni, 1982:933).

Positive/negative reactions - actions of solidarity or disagreement during the decision process (Ardnt and Crane, 1975:65. Kenkel (1961:280) refers to social and emotional actions/ideas and suggestions.

Conflict -disagreement between two or more members of a family resulting in inhibiting or preventing a joint decision (Sheth, 1974:31).

Conflict resolution - a process that occurs when preferences differ and which involves attempts by family members to influence each other while trying to reach a decision (Granbois, 1971:198; Sheth, 1974).

Bargaining - a technique that individuals use to reduce or avoid conflict. It involves mutual, long term considerations and may lead to explicit or tacit agreements [thereby affecting the outcome of the current and future consumer decisions] (Davis, 1976:255; Sheth, 1974:32).

Persuasion - a relatively short run effort or technique that family members use as a means of influencing others to make a specific decision that they would not otherwise have made (Davis, 1976:255; Sheth, 1974:33).

Negotiations - a process occuring under a conflict situation by which one family member wishes to overcome another member's resistance to his/her preferences (Hill and Scanzoni, 1982:933).

Consensus -the agreement of family members on issues related to the purchase of a product or service, thereby facilitating decision making. Goal consensus is the general agreement of the family members on the goals to be achieved by the group, on their priority relative to other goals and on the means utlized to attain them.

Patterns of decision making - distinct styles of assignment of power during a family decision process which describe individual influence during the decisions and on the outcome:

1. autonomic decision - shared decision making by delegating separate authority for specific types of decisions to individuals within the group (Nickell, Rice and Tucker, 1976:457)
2. syncratic decisions - shared decision making in which each decision is made by the group (Nickell, Rice and Tucker, 1976:465)
3. husband dominated decisions (Herbst, 1952: Macdonald, 1980: 850)
4. wife dominated decisions (Herbst, 1952; Macdonald, 1980: 850).
5. democratic decision making - the process in which those affected by the decisions have influcence in the process (Nickell, Rice and Tucker, 1976:459).
6. egalitarian decision making - equal relationship and power structure characterisized by no assumptions of prescribed dominance (Nickell, Rice and Tucker, 1976:459; Melson, 1980). Spouses share decision making responsibility and task performance (Qualls, 1981:268).
7. traditional decision making - a husband dominated family (Rosen and Granbois, 1983) where the husband assumes a masculine, provider role and the wife assumes the feminine housekeeper role (Qualls, 1981:268) with the wife expecting the husband to be dominant while she remains subserviant during decision making (Qualls, 1981; Assael, 1981).

Role specialization - family member development, modification or adaptation of his/her behavior such that s/he is an expert in or deal exclusively with a particular decision stage, activity or product (ie. fulfillment of specific consumer roles (Melson, 1980:183)). This concept was utilized by Davis and Rigaux (1974) although they did not define it specifically.

Influence - the degree to which pressure exerted by one spouse upon another is successful in imposing that spouse's preference about a pending decision despite initial opposition (Safilios-Rothschild, 1970:540). It is the impact that an individual has on a decision (Jenkins, 1979:207).

Influence strategy mix - types of strategies used by family members so as to affect the outcome of the decision. That person may claim to be an expert, claim legitimate authority, engage in bargaining, offer a reward, behave in the way s/he thinks the others want them to, or a combination of all of these (Spiro, 1983:394).

Dominance - a power relationship in which one person or part of a group has more influence than others (Nickell, Rice and Tucker, 1976:459).

D. Propositions

Introduction to Propositions

The current conceptual framework (Figure II.1) allowed the researcher to account for the documented propositions found in the literature. That task was the substance of the entire research effort for, sets of propositions or relationships among concepts are the basic elements of a model (Williams, 1979; Kerlinger, 1973; Burr, Hill, Nye and Reiss, 1979). Systematizing these propositions would allow for comprehension of the theoretical foundations of this model. Consequently, the propositions were ordered into meaningful groups resulting in ten sets and again ordered into process stages within the sets or by dependent variables when it was not feasible to order by stage. These interrelationships, depicted as sets of propositions, are outlined on page 32 and in Figure II.3.

Sets Of Propositions

EXTERNAL:

E1 - the effect of *external* influences on *decision process* variables

E2 - the effect of the *external* influences on *family member involvement*

FAMILY:

F1 - the effect of *family member involvement* at one stage on *family member involvement* at another stage of the decision process

F2 - the effect of the *family system* internal variables on *family member involvement*

F3 - the effect of *family member involvement* on the *decision process* variables

F4 - the effect of the *family system* internal variables on the *decision process* variables

PROCESS/PRODUCT:

P1 - the effect of *decision process* variables on other *decision process* variables (ie. one stage on another stage).

P2 - the effect of *product related* variables on the *decision process* variables

P3 - the effect of *decision process* variables on *family member involvement*

P4 - the effect of *product related* variables on *family member involvement*

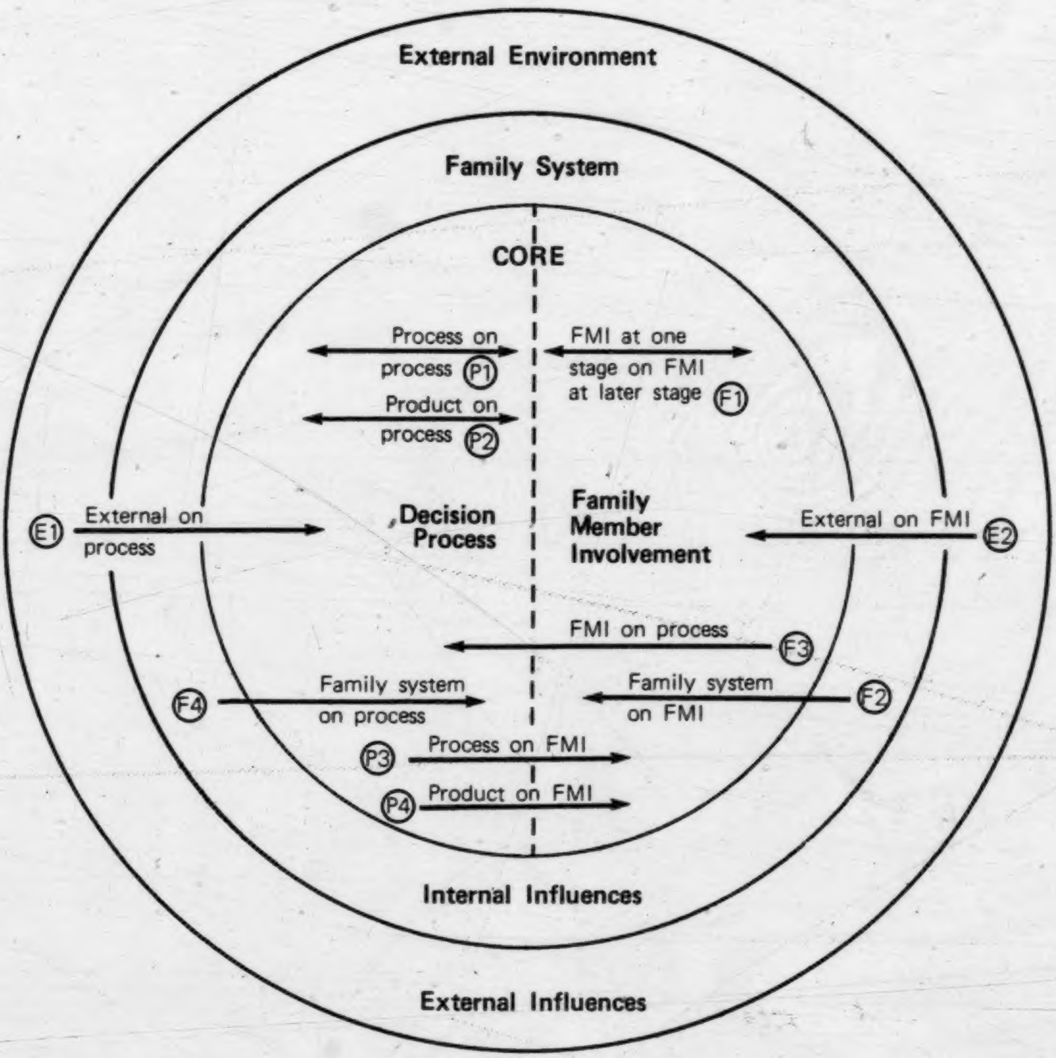

Figure II.3

A Process Model of Family Consumer Decisions Depicting Sets of Propositions

The concept of representing the influence of variables on other variables by lines with arrows (Figure II.3) is a recognized technique. The arrow indicates the direction of the influence (ie. the dependent variable at the tip is being affected by the independent variable at the other end). The lines with arrows at both ends (F1, P1, P2) indicate that the relationships occur between the variables within that half of the core.

It should be noted that most of the propositions are currently single variate. The simple and narrow concept of the single variable approach for expressing relationships follows from the early belief that all independent variables must be held constant except one, and there must be a "one to one" correspondence between a particular cause and a specific effect (Good, 1972). Since this study of main effects (Kidder, 1981) does contribute to the initial progress in the earlier stages of theory development (Good, 1972), the initial inclusion of predominantly single variant propositions is justified.

However, there is one major drawback from studying the effect of only one variable at a time. The single variant procedure does not enable the researcher to measure the inherent interaction effects and multivariate nature (Green and Tull, 1978) of the family consumer decision process. The general principle involved in studying interaction or multivariable effects is that the researcher would be testing for the existence of a potential relationship between a dependent variable(s) and a combined interaction of two (or more) independent variables (Popham and Sirotnik, 1973: 181) such that their combined effect is different from or greater than the sum of the their individual effects (Popham and Sirotnik, 1973; Runyon and Taber, 1980; Kidder, 1981).

Interaction effects require more complex theoretical explanations than main effects (single variant) and when examined may even introduce new concepts (Kidder, 1981). Furthermore, examining the multivariate nature of family decision making may enable the researcher to a) generalize the effects of one variable across several levels of another variable, b) demonstrate that a specific independent variable has no effect at all, or c) study the separate effect of a single variable while combined with several others (Kidder, 1981:34).

This researcher acknowledges that eventual incorporation of the reality of the effect of interactions is imperative if one is to study the dynamic complexity of the family consumer decision making process. For this immediate attempt to systemize the propositions however, most of them will be noted as one independent variable affecting a dependent variable with confidence that future research will strive to rectify this temporary deficiency through the incorporation of the appropriate research design and statistical analysis.

Another major step still to be taken is to use the conceptual framework to deduce additional propositions not found in the literature. These newly identified propositions, when empirically tested, would provide further confirmation or refinement of the model, thus contributing to the advancement and refinement of the developing model. Most importantly, the newly deduced propositions would serve as a basis for increasing the explanation, prediction and control of the phenomenon of family consumer decision making.

Each stated proposition contains a dependent and an independent variable both of which are italized so they are readily visible. Quite often, variables will appear in brackets. For instance, *group cohesiveness (interaction resource)*, indicates that group cohesiveness is a sub-concept of the broader concept of interaction resource. Also, if the variable in brackets follows regular text (eg. ... degree of current agreement (*consensus*)), this indicates that the author has arbitrarily assigned the italized variable in the bracket to the idea presented by the original source. Regardless, the reader will find a definition for each variable in italics and these definitions were provided in the previous section. The propositions are noted according to external, family process/product categories and are ordered by process stages except for F1, F2, P3 and P4 which are ordered by dependent variable.

A few of the propositions are unsupported by available evidence and thus are not referenced. They were drawn from insufficiently documented sources yet were included because they strengthened the framework of the model. This is not considered a drawback. On the contrary, Bennett (1977: 14) claimed that there are nearly always undocumented propositions in a theory and these are necessary to the internal consistency of the model.

A further note, the propositions were drawn from the marketing, family studies and consumer studies literature and are usually stated as they were found in the original source. Since much of the research in these disciplines concerns *individual* consumer behavior (Engel and Blackwell, 1982), many of the propositions pertain to an individual consumer instead of a family as a buying unit. So as to not lose credibility, and also so as not to lose the noted findings, the author elected to state the findings as shown in the original source with the expectation that future research will attempt to determine whether or not the individual propositions apply to the family as a buying unit. Sometimes however, modifications of the original propositions are used to make the propositions more appropriate.

A final comment - a few of the propositional relationships do not contain a specific direction (ie. positive / negative). In some instances, this is an oversight of the author and in other instances, because the findings were stated in context, the fault may lie with the reporting procedure of the researcher who conducted the original research. Again, despite the absence of a directional relationship, these propositions were included so as to strengthen the internal consistency of the model and to avoid omitting a potentially important variable.

To assist the reader in reading the propositions, the labels (ie.E1, F3, etc.) are carried over at the top right hand side of each page. It may also be helpful to refer page 32 and to Figure II.3 while reading the propositions.

Statement of Propositions

Summary Matrix of the Propositions

A summary of the propositions can be found in Table II.2. This summary matrix allows the reader to more readily determine exactly what relationships were documented and, more importantly, it serves as an illustration of any gaps in the documented findings. Furthermore, Table II.2 enables the reader to view the propositions at a glance prior to reading the numerous, documented propositions. Cross reference is facilitated by the inclusion of the specific set from which the proposition was obtained. For example, upon consulting Table II.2 the reader can see that problem recognition is a function of social class (E1), etc.. This indicates that if the reader goes to the E1 set of propostions s / he will find a proposition that states a documented relationship between problem recognition (dependent variable) and social class (independent variable). Furthermore, a variable in a bracket within the table with a specific set of proposition also in a bracket (eg. the independent variable (market force (E 1)) listed under P2 as affecting the dependent variable search) indicates that the bracketed variable is stated in a multivariate relationship within the text of the thesis. If the reader wishes to find that specific proposition, they simply go to the P2 listing of propositions within the text, under the dependent variable search, and they will a find a proposition that states that market force (in a combination with other independent variables) affects the dependent variable of search.

TABLE II.2 SUMMARY MATRIX OF PROPOSITIONS

DEPENDENT VARIABLES	INDEPENDENT VARIABLES				
	External Variables	Internal Variables	Family Member Involvement Variables	Process Variables	Product Related Variables
PROCESS CONCEPTS					
Problem Recognition	social class E1 reference groups E1 culture E1 (market force - F4)	resources: - affective involvement F4 - financial status F4 family life style F4 personal factor: - personality F4 socioeconomics and demographics: F4 - age and sex F4 motive F4 family life cycle F4 past experience F4		expectations P1 satisfaction P1	
Family Goal Restatement and Formulation					
- family goal setting/ complex	social class E1 culture E1 market force: - unanticipated circumstances E1	family life cycle F4 resources F4 time F4 risk capital F4 (uncertainty P2) value F4 role: - family financial officer F4 past experience F4 resources: - comparative resource F4		choice heuristic P1	product P2
- goal effectuation			consensus F3		

continued ...

TABLE II.2 SUMMARY MATRIX OF PROPOSITIONS

DEPENDENT VARIABLES	INDEPENDENT VARIABLES				
	External Variables	Internal Variables	Family Member Involvement Variables	Process Variables	Product Related Variables
Search					(product P4)
- internal search		personal factor: - quantity and quality of stored information F4			
- external search	market force E1			satisfaction P1 dissonance P1	perceived (social) risk P2
- extent of external search	market force: - perceived cost/ benefit of search E1 (P2) social class E1 (market force: - number of alternatives P2)	marital status F4 personal factor: - confidence in decision making F4 - personality F4 - quantity and quality of stored information F4 socioeconomics: - income F4 demographics: - education F4 time F4 family life cycle F4 need F4 resources: - financial F4	conflict F3 involvement F3 patterns of decision making F3 who is involved F3 conflict resolution strategies F3	information source P1	(perceived risk - F4) perceived risk P2 uncertainty P2 perceived similarity between alternatives P2 attribute sub decisions P2 length of commitment P2 importance of decision P2 price of product P2 interpurchase time P2 complexity of alternatives P2
- information sources	social class E1 culture E1 market force E1	demographics: - income F4 - education F4 motive F4 personal factor: - preferences F4	level of involvement F3	(expectation - F4) (process stage - F4) expectation P1 process stage P1	(perceived risk - P2)

continued ...

TABLE II.2 SUMMARY MATRIX OF PROPOSITIONS

DEPENDENT VARIABLES	INDEPENDENT VARIABLES				
	External Variables	Internal Variables	Family Member Involvement Variables	Process Variables	Product Related Variables
Search (Continued)					
- information processing		attitude F4 marital status F4 resources: - interaction resource F4	who is involved F3		
Alternative Evaluation			consensus F3		
- evaluative criteria	social class E1	resources: - family congruence F4 attitudes F4 family life style F4 past experience F4 family life cycle F4 norms F4 socioeconomics: - income F4			(perceived risk - E1)
- changes in evaluative criteria					perceived risk P2
- attitudes	reference group E1 market force: - advertising E1	past experience F4 socioeconomics and demographics: - affluence F4 - education F4 beliefs F4	level of involvement F3	information source (content) P1	perceived risk P2
- beliefs	reference group E1	attitudes F4		post purchase evaluation P1	

continued ...

TABLE II.2 SUMMARY MATRIX OF PROPOSITIONS

DEPENDENT VARIABLES	INDEPENDENT VARIABLES				
	External Variables	Internal Variables	Family Member Involvement Variables	Process Variables	Product Related Variables
Alternative Evaluation (Continued)					
- extent of alternative evaluation		resources: - family congruence F4 - time pressure F4 socioeconomics and demographics: - education F4 - income F4 - occupational status F4 need F4 personal factor: - attitude toward shopping F4 role (perception) F4		choice heuristic P1	
- choice heuristic	market force: - information accessibility E1 - perceived cost of search E1 - number of alternatives E1	personal factor: - personality F4 - stored information F4 past experience F4		(information processing - F4) information processing P1	(difficulty of decision - F4) product (high involvement) P2 complexity of alternative P2
Selection/Intention	economic system: - business condition E1 reference groups E1	beliefs F4 attitudes F4 role: - family financial officer F4 personal factor: - risk capital F4		search P1	perceived (social) risk P2
Purchase	market force: - unanticipated circumstances E1				

continued ...

TABLE II.2 SUMMARY MATRIX OF PROPOSITIONS

DEPENDENT VARIABLES	INDEPENDENT VARIABLES				
	External Variables	Internal Variables	Family Member Involvement Variables	Process Variables	Product Related Variables
Post Purchase Evaluation		authority F4 past experience F4			
- satisfaction/ dissatisfaction	market force: - number of competing alternatives E1	family life style F4 socioeconomics: - income F4 personal factor: F4 - risk capital F4 marital status F4 resources: - family congruence F4 motive F4 time F4	pattern of decision making F3 role specialization F3 consensus F3 involvement F3 (consensus P1)	expectations P1 goal setting P1 extent of search P1	perceived risk P2 product P2
- dissonance	market force: - new information E1 - (number of alternatives P2)	motive F4 time F4		search P1	importance of decision P2 attractiveness of unchosen alternatives P2 unique feature P2
FAMILY MEMBER INVOLVEMENT					
Involvement/Participation		personal factor: - distolerance F2 - vanity bias F2 sex role attitude F2 resources: - comparative resource F2 - past experience F2 authority F2 motives F2 demographics: - size of family F2 family life cycle F2	influence F1	process stage P3 evaluative criteria P3	product P4 price of product P4

continued ...

TABLE II.2 SUMMARY MATRIX OF PROPOSITIONS

DEPENDENT VARIABLES	INDEPENDENT VARIABLES				
	External Variables	Internal Variables	Family Member Involvement Variables	Process Variables	Product Related Variables
Interaction		demographics: - size of family F2 sex role attitude F2 past experience F2 role (perception) F2	interaction F1 consensus F1 conflict F1	(process stage - P4)	(importance of decision - F2) importance of decision P4
- positive/negative reactions		demographics: - income F2 sex role attitude F2	(consensus - F2)		
- consensus		family life cycle F2 past experience F2 resources: - comparative resources F2 - group cohesiveness F2	role specialization F1 conflict F1	process stage P3 evaluative criteria P3	
- conflict		family life cycle F2 resources: - comparative resource F2 - affective involvement F2 sex role attitude F2 motive F2	pattern of decision making F1 consensus F1		product P4

continued ...

TABLE II.2 SUMMARY MATRIX OF PROPOSITIONS

DEPENDENT VARIABLES	INDEPENDENT VARIABLES				
	External Variables	Internal Variables	Family Member Involvement Variables	Process Variables	Product Related Variables
Patterns of Decision Making	culture E2	family life cycle F2 demographics: - income F2 - years married F2 - age F2 - occupational status F2 - employment status F2 - urban/rural F2 values F2 sex role attitude F2 past experience F2 resources: - connectedness F2 - comparative resource F2	consensus F1		importance of decision P4 complexity of alternatives P4
Role Specialization		sex role attitude F2 resources: - financial F2 - comparative resources F2 values F2 demographics F2 past experience F2 family life cycle F2		process stages P3 evaluative criteria P3	product P4 importance of decision P4 complexity of alternatives P4 perceived risk P4

continued ...

TABLE II.2 SUMMARY MATRIX OF PROPOSITIONS

DEPENDENT VARIABLES	INDEPENDENT VARIABLES				
	External Variables	Internal Variables	Family Member Involvement Variables	Process Variables	Product Related Variables
Influence		(motive - F2) resoutces: - comparative resources F2 - affective involvement F2 - flexibility F2 role structure F2 family life cycle F2 motive F2 past experience F2 values F2 family life style F2 demographics: - sex F2	interaction F1 involvement F1 influence F1	evaluative criteria P3 process stage P3 (evaluative criteria - P4)	product P4
- influence strategy mix		demographics: - education F2 - age F2 - employment status F2 family life style F2 attitude F2 socioeconomics: - income F2 family life cycle F2 power F2			importance of decision P4

E1 - External variables on decision process variables

PROBLEM RECOGNITION

1. *Social class* affects the *problem recognition* stage (Cohen, 1981).

   a. Upper and middle class are likely to recognize a problem exists when goods or services are not compatible with social class patterns they wish to maintain.

   b. Social class can elicit different adoption patterns for products thereby influencing problem recognition (Cohen, 1981:22).

2. *Reference groups* influence the *problem recognition* stage by drawing to its members attention innovations or changes in products (*market forces*) (Venkatesan, 1966; Hansen, 1976:373).

3. *Cultural background* will affect *attitudes, perceptions and motivations* hence *problem recognition* (Graham, 1954: 166).

GOAL RESTATEMENT AND FORMULATION

1. *Social class* affects the *goal setting* stage (Cohen, 1981:22):

   a. Social class influences the spend-save aspirations of a family (Cohen, 1981:22)

   b. Lower class families are less able to cope with deferred gratification therefore they are more likely to buy on credit at the purchase stage and consequently, set goals accordingly. Middle class families are more likely to plan their purchases ahead of time (Segal, Boone and Kurtz, 1974: 115).

2. The family's *cultural* background will influence *goal setting* activities and priorities (*family goal complex*) (Kerby, 1975:561; Engel, Kollat and Blackwell, 1968:232).

3. *Unanticipated circumstances (market forces)* may lead to abandonment of previously developed detailed goals and *development of new goals* (Bettman, 1979:69).

SEARCH

1. The *perceived cost/benefits of search (market force)* will influence the *extent of search* (Granbois, 1971: 185; Claxton et al, 1974: 35; Engel and Blackwell, 1982: 125).

2. The *extent of search* and the *information sources* used by the consumer will vary by

social class (Engel and Blackwell, 1982):

a. Social class will influence the individual's perception of the role of store personnel (information source) while searching for information (Advertising Age: 1960:63).

b. Families in the middle class are more likely to engage in an external search using a wide range of information sources (Engel ,Kollat and Blackwell, 1968: 138).

c. Consumers in the lower class are more likely to engage in a limited external media search and instead rely upon their close friends and families as credible sources of information (Hawkins, 1977: 165).

d. There is likely a higher degree of perceived social risk as social class increases, therefore more extended search (Stanton et al, 1977: 119).

e. Consumers will have different connotations or interpretations of media source and content (*information source*) depending on their social class (Engel, Kollat and Blackwell, 1968: 138; Advertising Age: 1960:63).

3. The *extent of external search* is influenced by the marketing *information source (market force)* (Bettman, 1979: 135).
4. *Culture* affects the media selection used for search activity (*information source*) by determining the importance of different sources to the consumers (Hawkins, 1977; Engel, Kollat and Blackwell, 1968).
5. *Social class* affects the family *accessibility to information sources (market forces)* about the product or service and therefore the *information source* used (*search*) (Melson, 1980: 191).
6. A consumer *perception* of *information sources* is affected by the sheer pace and number of stimluations from the market place (*market forces)* (Melson, 1980: 186).
7. The greater the rate of change of product attributes and innovations (*market forces*) the higher the probability that an *external search* will occur (Engel, Kollat and Blackwell, 1968:383).

ALTERNATIVE EVALUATION

1. When *information is not accessible* simultaneously for all alternatives (*market forces*) and *costs are involved in obtaining further information (perceived costs of search)*

a *satisficing (choice heuristic)* approach is used while evaluating alternatives (Punj and Stewart, 1983:186).

2. *Reference groups* directly affect *beliefs* (Engel and Blackwell, 1982:448).
3. *Attitudes* are influenced by *reference groups* (Segal et al, 1974:107; Stanton et al, 1977:98; Engel and Blackwell, 1982:448).
4. *The number of alternatives (market forces)* will determine whether *compensatory or non-compensatory choice heuristic* rules will be used while evaluating alternatives (Bettman, 1979:226; Punj and Stewart, 1983:186; Stalin and Payne, 1976).
5. *Attitudes* are influenced by the advertising and promotions (*market forces*) (Stanton et al. 1977:98).
6. The *criteria* used to *evaluate alternatives* (*evaluative criteria*) are determined by *social class* and are partly due to the products social visibility (*perceived risk (product related)* (Hansen, 1976:373).

SELECTION/INTENTION

1. A consumer's *intentions* to purchase a product or service are affected by *business conditions (economic system)* (Granbois, 1971:190).
2. *Reference groups*, through normative compliance, influence *intention to buy* a product or service (Engel and Blackwell, 1982:452).

POST PURCHASE EVALUATION

1. The probability with which an alternative is *satisfactorily evaluated* is dependent upon the *number of competing alternatives* available *(market forces)* and being considered (Hansen, Munsinger and Draper, 1972:400).
2. When a consumer is exposed to new, favorable information about the rejected alternatives (*market forces*), there is potential for *dissonance* (Engel and Blackwell, 1982).

E2 - External variables on family member involvement

Note: this section is very limited because family member involvement is seen to be indirectly more than directly affected by the external environment. In other words, the internal environment (family system) acts as a screen or filter between the external environment (Engel and Blackwell, 1982; Ward and Robertson, 1973; Kieren, Henton and Marotz, 1975) and the family member involvement half of the core of the model.

1. The normative resources (*culture*) may serve largely as a sufficient condition for the emergence of a particular *pattern of decision making* (McDonald, 1980:848; Engel, Kollat and Blackwell, 1968:20).
2. Changes in normative expectations (*culture*) may be a better variable to explain *patterns of decision making* than to explain actual changes in decision making behavior (McDonald, 1980:850).

F1 - FMI at one stage on FMI at another stage

Note: FMI stands for "family member involvement". This set of propositions is listed by dependent variable.

INVOLVEMENT/PARTICIPATION

1. The members' actual *involvement* in the shopping or purchase activity will be dependent upon whether their preferences were taken into account (*influence*) (Davis, 1976:243).

INTERACTION

1. *Interaction* at one stage will likely be facilitated if members communicate their individual dispositions towards acceptable alternatives *(interactions)* during earlier stages (Burns and Granbois, 1977:81).
2. The degree to which spouses agree on the *pattern of decision making* to be adopted (*consensus*) will affect their *interaction* during decision making (Burns and Granbois,

1977:85).

3. Differences in choice preference may cause *conflict* and endanger *negotiations (interactions)*at a later stage of the decision (Burns and Granbois, 1977:85).

CONSENSUS

1. Couples with highly *specialized roles* will be more apt to display *consensus* (Davis, 1970:283).
2. The relation of family goals to the motivational structure of the individual members goal(*consensus*) must exist so that the larger family system can function without undue internal *conflict* (Edwards, 1970:655).

CONFLICT

1. The more *egalitarian* the *pattern of decision making*, the less *conflict* with regards to *resource allocation* (Richmond, 1976).
2. *Conflict* is likely to occur in later stages when there is disagreement over the purchase goals (*non consensus*) (Belch et al., 1979:475)

PATTERNS OF DECISION MAKING

1. The more similar spouses perceive the decision to be *(consensus)* at the *problem recognition*) stage, the more likely it is that it will be resolved jointly (*pattern of decision making*) (Burns and Granbois, 1977:85).
2. Joint decisions (*pattern of decision making*) are less likely to occur if one spouse presumes control but there has been prior *consensus* on who would be in control (Burns, 1977:52).
3. The more similar family members are in their perception of and agreement on saving activities and money related activities (*goal consensus*), the more likely they are to delegate the financial tasks to one person (*pattern of decision making*) (Ferber and Lee, 1974:47).

INFLUENCE

1. The relative amount of talking done (*interaction*) by families during the decision

process may determine who makes the selection and subsequently *influences* the final choice of (Kenkel, 1961:259).

2. The greater the family member's *involvement* in the *attribute sub-decisions (product related)*, the greater the likelihood of that person *dominating (influencing)* the final selection (Woodside, 1975:88).
3. The family member making the final selection will consider the views of relevant others (*influence*) when the appropriateness of doing so is made salient to him or her (*influence*) (Wind, 1976).
4. The family member who initiated the problem recognition or the decision process (*involvement*) is most likley to be the prime *influencer* in the *selection and intention* to buy (Assael, 1981:350).

F2 - Family system (internal) variables on FMI

NOTE: These propositions are listed by dependent variable.

INVOLVEMENT/PARTICIPATION

1. *Involvement* depends upon the degree to which an individual will tolerate or accept a position that is different from his/her own beliefs *((distolerance) (personal factors))* (Engel and Blackwell, 1982:467).
2. Each family member's perception of *sex roles (sex role attitude)* may influence the allocation of decision making responsibility (*participation*) among members (Qualls, 1981:267; Scanzoni and Fox, 1980:746; Scanzoni, 1977:18).
    a. Depending on the degree to which traditional role models are adhered to by the family (*sex role attitude*), the more likely that search activities will be delegated to the parents instead of the whole family (*participation*).
3. *Attitudes* and task allocation (*involvement*) during decision making are affected by the *comparative resources* of the spouse (McDonald, 1980:850).
4. *Involvement* during decision making is greatly influenced and to a great degree regulated by the *comparative resources* that the spouse brings to the process (Davis, 1976:250; Safilios-Rothschild, 1970:548; Jenkins, 1979:209).

5. Individuals with a *vanity bias (personal factors)* will be most likely to get *involved* in the decision process regardless of *role specialization* (Bonfield, 1978:306).
6. Whether a couple agree about their roles in a prior decision (*role consensus (past experience)*) may effect their *participation* in a future decision (Davis, 1970:284).
7. The amount of *authority* a family member has will inversely affect his/her *involvement* in the decision process (Burns, 1975:200).
8. It is quite probable that individuals will engage in the decision process for different reasons (*motives*) which in turn affect the extent of their *involvement, participation and influence* (Davis, 1976:253).
9. When the individual member faces a sequence of decisions, it is possible that s/he may give up *control (influence)* over those of little interest (*motive*) for more *control* over those of greater interest (Davis, 1976:251).
10. *Motivation*, rather than general *authority* structure of the family, should determine family member *involvement* in specific decisions (Davis, 1976:251).
11. The larger the family (*demographic*) , the more likely that the search process will be delegated (*involvement (participation)*).
12. The older the children (*family life cycle*), the more likely they are to *particiapte* in the search and actual purchase stages.
13. The *involvement* of family members in the selection and intention to buy depends upon their position in the *family life cycle*.

INTERACTION

1. The amount of *interaction* will decrease as the size of the family (*demographics*) increases (Melson, 1980: 138)
2. An individual member's *sex role attitude* affects the degree of family *interaction* (Qualls, 1982:269).
3. The amount of defensiveness, resignation and resentment (*positive/negative reactions*) occuring during familial *interaction* varies directly with *income, sex role attitude and goal disparity (lack of consensus*) of family members (Hill and Scanzoni, 1982:937; Ahrons and Bowman, 1981).
4. The family member's perception of past decision making (*past experience*) exercises

a strong influence on current communications styles [thereby affecting *interaction* during decision making] (Hill and Scanzoni, 1982:937).

5. In the alternative evaluation stage, the amount of *interaction* seems to depend upon the *importance of the decision (product related)* and familiarity with the product *(past experience)* (Hansen, 1976:399).
6. There is a general tendency across all decisions, for the husband to overestimate his role and for the wife to underestimate her influence (*role* perception), thereby affecting *interaction* during decision making (Burns, 1977:55).

CONSENSUS

1. Spousal agreement *(consensus)* regarding each other's preferences for an alternative will vary according to stage in the *family life cycle* (Cox, 1975; Davis, 1976:253).
2. The degree of prior *consensus* in decision making (*past experience*) affects the degree of current agreement (*consensus*) between family members (Hill and Scanzoni, 1982:938; Gulliver, 1979).
3. The income disparity between family members (*comparative resources*) affects the perception of the importance of the decision (goals) to different family members (*consensus*) (Hill and Scanzoni, 1982:938).
4. The greater the *group cohesiveness (interaction resources)*, the greater the probability that the members will prefer the same alternative (*consensus*) (Stafford, 1966:75).

CONFLICT

1. The stage in the *family life cycle* will influence the amount of *conflict* (Melson, 1980:138)
2. The greater the wife's income (*comparative resource*), the higher the probability of *conflict* (Melson, 1980: 134).
3. The larger the discrepancy in satisfaction with shared companionship (*affective involvement (interaction resource)*), the greater the likelihood for *conflict* during decision making (Hill and Scanzoni, 1983:935; Ahrons and Bowman, 1981).
4. An individual's increased interest in sex role (*sex role attitude*) has potential to

increase the occurence and intensity of *conflict* (Scanzoni and Fox, 1980:746).

5. The less each family member is *motivated* to contribute to the achievement of the family goals, the greater the probability that there will be internal *conflict* in the family system (Edwards, 1970: 655).

PATTERN OF DECISION MAKING

1. As the family progresses through the *family life cycle* their *patterns of decision making* may change (Melson, 1980: 136).
    a. The likelihood that *financial resource assessment and allocation* is done separately by a single family member (*pattern of decision making*) increases as the family progresses through the *family life cycle* (Rosen and Granbois, 1983:257).
2. Changes in the size of the family (*family life cycle*) will affect *patterns of decision making* (Melson, 1980:137).
3. Dual income families (*demographics*) tend to be less *traditional* and more *egalitarian (pattern of decision making)* when deciding major financial expenditures (*resource allocation*) (Nye and Hoffman, 1963).
4. Saving money (*values*) will affect future plans of consumption (*goal setting*) (Melson, 1980).
5. *Sex role preferences (sex role attitudes)* will affect the likelihood that families will question the *patterns of decision making* (Scanzoni and Fox, 1980:746; Qualls, 1981:267).
6. The family's extensive experience as a decision making unit (*past experience*) is associated with a reduction in joint decision making (*pattern of decision making*) (Hemple, 1975:75).
7. *Connectedness (interaction resources)* of the spouses is inversely related to the degree of joint decison making (*pattern of decision making*) (Hemple, 1975:75).
8. *Demographics (eg. age, years married, occupational status and employment status) and comparative resources)* are related to *pattern of decision making* (Hemple, 1975:75).
9. The *pattern of decision making* varies according to whether the family lives in an urban area or rural area (*demographic*) (Wolgast, 1958:154).

ROLE SPECIALIZATION

1. *Sex role attitudes* will account for differences in family member perception of *role specialization* (Qualls, 1981:268; Bonfield, 1978:300).
    a. The likelihood that the husband or wife will be in charge of the *financial resources (role specialization)* will be dependent on the *sex role attitude* of the male and female in the couple (Rosen and Granbois, 1983:256).
2. The principle determinant of whether the *family financial officer* is the couple acting jointly (*role specialization*) is their attitude towards the goal of saving money (*values*) (Ferber and Lee, 1974:50).
    a. Families who assign high priority to saving money (*values*), are more likely to allocate the decision making responsibility regarding finances to one member rather than to several (*role specialization*) (Ferber and Lee, 1974:54).
3. The wife's employment status (*comparative resource*) will affect *role specialization* (Shuptrine and Samuleson, 1976:89).
4. The couple will be more likely to act jointly as the *family financial officer (role specialization)* if both are employed, have the same amount of eduation (*comparative resources*) and equally *value* price and money (Ferber and Lee, 1974:46).
5. The *larger the family (demographics)*, the more likely that the purchase *role* will be delegated.
6. The family member with specialized knowledge about the product (*past experience*), will be most likley to be delegated to perform the actual purchase(*role*).
7. The likelihood that *financial resource assessment and allocation (role)* is done separately by a single family member (*family financial officer*) increases as the family progresses through the *family life cycle* (Rosen and Granbois, 1983:257; Ferber and Lee, 1974:54).

INFLUENCE

1. The type of technique used to influence the decision process (*influence strategy mix*) will depend upon the education, age and dominance of the family member (*demographics and power*) (Safilios - Rothschild, 1970:541; Spiro, 1983).

2. The wife in particular will be more inclined to exert her *influence* when her *comparative resources* are the greatest (Spiro, 1983:399).
3. The spouse who has relatively less feelings for the other person (*affective involvement (interaction resources)*) may be most likely to control and manipulate his/her *comparative resources* so as to *influence* the outcomes of the decision and possibly *dominate* the decision making process (Heers, 1963; McDonald, 1980:847; Safilios-Rothschild, 1970:549).
4. *Role consensus (role structure)* may be related to relative *influence* (Davis, 1970:283).
5. Wives are more likely to lose *influence* during the child rearing stage of the *family life cycle* (Blood and Wolfe, 1960; Spiro, 1983:395).
6. The established *role structure* of any given family will affect how the *influence* of relevant others is made salient in the buying decision (Munsinger, Weber and Hansen, 1975:61).
7. The family members who have the greatest interest in the use of product (*motive*) are most likely to be *influential* in assessment of *evaluative criteria*.
8. The relative *influence* of family members in making a final selection may be dependent upon their *past experience* with decision making (Woodside, 1975:82).
9. Within a family, individuals will have different *values* and these will affect how they seek to implement (*and influence*) the decision process so as the reach the goals they value.
10. There appears to be a tendency to make less use of *persuasion (influencing strategy mix)* as a means of *influencing* the outcome as the person gets older (*demographics*) (Spiro, 1983:399).
11. In general, people who are more traditional in their *life styles* and *attitudes* are most likely to use *persuasive influence* during the decision making process (*influence strategy mix*) (Spiro, 1983:401).
12. *Family life style* is an important determinant of the spouse's degree of *influence* during decision making (Spiro: 1983:395).
13. Couples will resort to various *influence strategy mixes* depending upon *sex, attitude towards conflict, education, income, stage in the family life cycle and employment*

status of the wife (demographics) (Spiro, 1983:401).

14. There will be a correlation between the family member's *occupation and education (comparative resources)* and the extent of his/her decision making *power* (Safilios-Rothschild, 1970:547; Dahl, 1968:409; Green, et al, 1983:436; Hemple, 1975:73; Fox, 1973; McDonald, 1980:848).
15. The spouse most inclined to maintain his/her preferences *(flexibility (interaction resources)* during the decision making process will most likely exhibit the higher degree of *influence* (Burns, 1975:206).
16. The sex (*demographics*) of the family member affects the individual's *influence* on the process of evaluating *attribute sub-decisions* (Hansen et al, 1972:401).

F3 - FMI on the decision process variables

GOAL RESTATEMENT AND FORMULATION

1. When agreement exists (*consensus*) among the family members about which goals are desirable, problem solving behavior (*goal effectuation*) is likely to occur (Davis, 1976:254).

SEARCH

1. Levels of *involvement* will affect the individual's *attitude (alternative evaluation)* towards the credibility of the *information source (search)* (Engel and Blackwell, 1982:471).
2. Families experiencing interpersonal problems (ie. *conflict*) may conduct a limited search for information (*extent of search*) (Melson, 1980:141).
3. *The older and more experienced* the family member is who does the searching (*involvement*), the more likely the *external search* will be limited (*extent of search*).
4. The *extent of search* is lower among consumers in which decision making is performed by one member than it is if families have joint *patterns of decision making* (Engel, Kollat and Blackwell, 1968:387; Granbois, 1963:155).

5. The family member *who* is searching for information will influence the level and type of *information source (search)* that the family is exposed to and the way that the stimuli are interpreted (*information processing (search)*) (Assael, 1981:342).
6. The *extent of external search* is influenced by the *conflict resolution strategies* used (Bettman, 1979:135).

ALTERNATIVE EVALUATION

1. Families that have not achieved *consensus about evaluative criteria* will be more likely to depend on *reference or peer group* opinions rather than family agreed upon criteria while *evaluating the alternatives* (Tallman, 1971:340).

POST PURCHASE EVALUATION

1. The extent to which family members regularly participate in joint decisions(*patterns of decision making*) will affect the final degree of *satisfaction* with the purchase.
2. Family member *satisfaction* with a product or service that does not perform as well as *expected* will vary directly with the amount of effort expended (*participation*) during search (Granbois, 1971:195).
3. *Satisfaction* with the purchase is likely to be greater if neither spouse is perceived as *dominant* with regards to any one stage of the decision (*role specialization*) (Hemple, 1975:79; Burns, 1977:50).
4. The degree of *consensus* both on the *criteria and the availability of resources* will affect the level of *satisfaction*.
5. The *uninvolved* spouse (*participation*) may still vicariously derive *satisfaction* from the decision process if his/her spouse is satisfied (Burns, 1975:206).

F4 - Family system variables on the decision process variables

PROBLEM RECOGNITION

1. *Affective involvement (interaction resource)* will affect recognition that present

decisions may affect future concerns (*problem recognition*) (Melson, 1980).

2. *Problem recogniton* may be affected by savings on hand (*financial status (resource)*) (Ferber and Lee, 1974:47).
3. *Family life style, personality (personal factor) and socioeconomics and demographics* influence *problem recognition* (Engel and Blackwell, 1982).
4. In order for consumers to *recognize a problem* there must be sufficient goal hiatus (*motivation*).
5. Stage in *family life cycle* directly affects *needs* and thus *problem recognition* (Engel and Blackwell, 1982).
6. *Past experiences* of the consumer will stimulate and/or suppress *need* arousal (*problem recognition*) (Engel and Blackwell, 1982).
7. Age and sex (*demographics*) of the family members determine their reaction to promotions, store stimuli, etc.(*market forces*), thereby affecting *problem recognition*.

GOAL RESTATEMENT AND FORMULATION

1. Families in different stages of the *life cycle* will behave differently with regards to *resource allocation* (Hansen, 1976:373; Arndt, 1978:132; Miller, 1975:98).
2. The availability of family *resources* will determine the family's involvement in long term *goals (goal setting)* (Deacon and Firebaugh, 1981).
3. Families will vary greatly in their orientation to *time* and this will affect their planning and *goal setting* (Komarvosky, 1958:28; Brinberg and Wood, 1983:338).
4. When an individual is reasonably certain that the source of income will continue for some time into the future (*risk capital*), that individual is more likely to engage in *goal setting behavior* than if some *uncertainty (product related)* exists (Kerby, 1975:131).
5. *Values* of the family members will probably influence the decisions related to *goal setting* (Deacon and Firebaugh, 1981:63).
6. Whether the husband or wife is the *family financial officer (role)* will affect saving practices and *goal setting activities* (Ferber and Lee, 1974:50).
7. Current family decisions related to *goal setting* are significantly affected by *past*

experience pertinent to outcomes and how those decision were managed (Hill and Scanzoni, 1982:929).

8. *Group cohesiveness (interaction resources)* enables the individuals and families to engage in greater risk taking *(family goal setting)* than is the case when such support is lacking (Tallman, 1971:342).

SEARCH

1. The *amount of information (extent of search)* gathered prior to a purchase will be greater for the individual consumer than for a family or married couples (*marital status*) (Rudd and Kohout, 1983:305).
2. *Search* is more likely when *confidence in decision making (personal factor)* is low, indicating an increased *perceived value of search* (Engel and Blackwell, 1982:326).
3. Lower income families (*socioeconomics*) will have impaired accessability to information sources and therefore will have a less *extensive search* (Melson, 1980: 189).
4. Income and education (*demograhics*) of the family members will influence their ability to acquire useful *information sources (search)* about the purchase (Melson, 1980: 190).
5. A consumer's *perception (personal factor)* of the *information sources (search)* is affected by his/her *motives* and *expectations* (Melson, 1980:186).
6. *Perception* of incoming stimuli from *market forces (information processing)* during *search* is affected by *attitude* (Segal et al, 1974:107).
7. *Education, income (socioeconomic and demographics) and perceived risk* are positively associated with *extended search* (Claxton, Fry and Portis, 1974: 42).
8. *Married couples* are less likely to *process information (search)* thoroughly thus they have shorter decision making time than individual consumers (Rudd and Kohout, 1983:305).
9. The greater the importance of *time* the lower the *extent of search* (Engel and Blackwell, 1982:327).
10. The *extent of external search* is influenced by individual differences (*personality (personal factor))* (Bettman, 1979:135).

11. The *extent of search* will vary by stage in the *family life cycle* (Bettman, 1979:135).
12. The greater the urgency of the *need*, the lower the *extent of search* (Katona and Mueller, 1955:30).
13. The greater the *need* for variety, the greater the *extent of search* (Katona and Mueller, 1955:30).
14. The degree of *internal search* may be higher the more relevant the *quality and quantity of stored information (personal factor)* (Bettman, 1979:134).
15. *Interaction resources* of the family affect how they will *process the information (search)* so as to reach their *goals* (Melson, 1980:192)
16. The more restricted one's *financial resources* the more constricted is the range of *products and alternatives* from which to choose (*extent of search*) (Melson, 1980:190).
17. Consumers will *search more extensively* when they initially know little about the product (*quality and quantity of exisiting stored information (personal factor))* (Bucklin, 1966:22; Granbois, 1971:185: Engel, Kollat and Blackwell, 1968:383; Katona, 1964:290; Moore and Lechman, 1980; Jacoby et al, 1978:541).
18. The *information source (search)* is a function of the *individual preferences (personal factor) and stage in the decision process* (Rosen and Granbois, 1983:254).

ALTERNATIVE EVALUATION

1. The level of *family congruence (interaction resources)* will affect the *time (extent of alternative evaluation)* spent in reaching the decision (Heffring, 1979:495).
2. The level of *family congruence (interaction resources)* will affect the appropriateness of the decision in terms of better fulfillment of family members individual choices (*evaluative criteria*) (Heffring, 1979:495).
3. *Individual differences (personality)* can affect aspects of the *alternative evaluation process (choice heuristics)* (Bettman, 1979:134).
4. *Attitudes* are affected by *past experience* (Segal et al, 1974:107; Stanton et al, 1977:98).
5. *Evaluative criteria* are affected by *attitudes* (Engel and Blackwell, 1982:445).
6. *Beliefs* are influenced by *attitudes* (Stanton et al, 1977:97).

7. *Attitudes* are affected by education and affluence (*socioeconomics and demographics*) (Kerr and Littlefield, 1974:424).
8. *Attitudes* are influenced by *beliefs* (Stanton et al, 1977:97; Engel and Blackwell, 1982).
9. The propensity to evaluate alternatives (*extent of alternative evaluation*) increases as the consumer's *education, income and occupational status (socioeconomic and demographics)* increase (Katona and Mueller, 1955:30).
10. The greater the perceived urgency of *need*, the lower the propensity to evaluate alternatives (*extent of alternative evaluation*) (Katona and Mueller, 1955:30).
11. The more favorable the *attitude towards shopping (personal factor)*, the greater the propensity to evaluate alternatives (*extent of alternative evaluation*) (Katona and Mueller, 1955:30).
12. The time required for deliberation of the alternatives (*extent of evaluation*) is related to the *role perception* of the members (Hemple, 1975:77).
13. As *time pressure (resource)* increases, a smaller *number of alternatives* is used while evaluating alternatives (Wright, 1975:60).
14. The particular *choice heuristic* that a family member uses will depend upon the particular rules known to the individual (*past experience*), the *perception* of *decision difficulty (product related)*, the *amount and organization of stored information (personal factor)*, plus *information processing (search)* abilities (Bettman, 1979:227).
15. *Family life style* will probably affect the *evaluative criteria* used in *alternative evaluation* (Engel and Blackwell, 1982).
16. *Evaluative criteria* used for *alternative evaluation* are based partially upon relevant *past experience* of the family member(s).
17. *Evaluative criteria* are subject to variation as family composition changes over the *family life cycle* (Hansen, 1976:373).
18. *Preferences for alternatives* are reflective of the *values (through evaluative criteria)* which family members hold both jointly and individually.
19. *Income (socioeconomics)* is likely to guide *alternative evaluation* via the process of consumers setting up an income-price interval as an *evaluative criteria* (Engel and

Blackwell, 1982).

SELECTION/INTENTION

1. *Intention* to purchase a product or service is a function of *norms* (Engel and Blackwell, 1982:452).
2. Changes in *beliefs* may lead to changes in purchase *intentions* (Engel and Blackwell, 1982: 448).
3. Buying *intentions and selections* are influenced by *attitudes* (Stanton et al, 1977:98; Engel and Blackwell, 1982:448).
4. The individual who makes the final *selection* will probably do so because they have *budgeting power (family financal officer) (role)* (Assael, 1981:342).
5. A family's *intention* to purchase a product or service is affected by expected changes in future income (*risk capital*) (Granbois, 1971: 190).

POST PURCHASE EVALUATION

1. The greater the family's satisfaction with its *life style*, the greater the likelihood that the member will be *satisfied* with their purchase.
2. The more the family members perceive that the purchase falls within the bounds of their income *(socioeconomics and (risk capital))*, the greater the likelihood of *satisfaction* (Kerby, 1975: 133).
3. *Marital status, home ownership and income (socio-economics and demographics)* will be less related to *satisfaction* than will most *personal characteristics (factors)* (Ash, 1978:257).
4. The higher the level of *family congruence (interaction resource)*, the higher the level of *satisfaction* (Heffring, 1979:495).
5. The family member who has the most to gain (*motive*) from the purchase of a product or service will most likely experience the most *(dis)satisfaction or dissonance*.
6. The less *time* available for the decision process, the more likely the family members will experience *dissonance and dissatisfaction* with the purchase.
7. Typically, the person who has the *authority* to make a particular decision also gets the credit for *the decision outcome* (Davis, 1976:255).
8. The family member most familiar with the product (*past experience*) prior to its

purchase will be the one most likely to scrutinize the acceptability and the performance of the product after it is purchased (*post purchase evaluation*).

P1 - Decision process variables on decision process variables

Note: These propositions are listed by the stage that is affected, that is by dependent variable.

PROBLEM RECOGNITION

1. When a product or service does not live up to *expectations* resulting in *dissatisfaction or dissonance*, this influences future decisions (*problem recognition*) (Melson, 1980:191).
2. *Satisfaction* with a purchase will increase the likelihood of a similar purchase occuring in the future (*problem recognition*) (Katona, 1964:288).

GOAL RESTATEMENT AND FORMULATION

1. *Choice heuristics* formed from previous purchase experiences may provide a set of general rules for the *development of goals (family goal setting)* for current decisions (Bettman, 1979:68).

SEARCH

1. A consumer's *perception (personal factor)* of the *information source (search)* is affected by *expectations* (Melson, 1980:186).
2. *Fewer information sources* are used (*extent of search*), if *information source* is from friends and local retailers rather than from commercial *information sources* (Staelin and Payne, 1975).
3. The greater the *satisfaction* with prior, similar purchases, the lower the probability that an *external search* will occur in the future (Katona, 1964:289).
4. The *information source (search)* is a function of *stage in the decision process* (Rosen and Granbois, 1983:254).

5. *Dissonance* will likely induce the most affected member to *search* for additional information that serves to confirm the wisdom of his/her purchase (Engel and Blackwell, 1982; Melson, 1980:191).

ALTERNATIVE EVALUATION

1. The particular *choice heuristic* used depends upon the family member's *information processing* abilities *(search)* (Bettman, 1979:227).
2. The time required for *(extent of) alternative evaluation* may be directly affected by the *choice heuristic* used to evaluate the alternatives (Park and Lutz, 1982:114).
3. *Post purchase evaluation* of a purchase can result in a modification of a future purchase of a similar product or service (*beliefs*) (Engel and Blackwell, 1982).
4. The message content of the advertisment (*information source (search)*) will determine whether or not there is a change in an individual's *attitude* (Engel and Blackwell, 1982: 480).

SELECTION/INTENTION

1. As family members expose themselves to increasing amounts of relevant information (*search*), they will make more efficient *selections* from among the available alternatives (Sproles, Geistfled and Badenhop, 1978:88).

POST PURCHASE EVALUATION

1. The closer a *product's* performance is to the *expectations*, the greater the possibility of *satisfaction* (Cohen, 1981:414).
2. The more rational and non-impulsive (*goal setting*) the purchase, the greater the probability of *satisfaction*.
3. *Satisfaction* will vary directly with the *extent of search*, the degree to which long range consequences were considered *(goal setting)* and the amount of family *consensus* (Granbois, 1971:195; Miller, 1975:98).
4. Consumers who *obtain adequate information (search)* will probably experience less *dissonance* than those who buy without sufficient information (Holloway et al, 1971:403).

P2 - Product on decision process variables

GOAL RESTATEMENT AND FORMULATION

1. Decisions to spend rather than to save (*goal setting*) will likely involve *across product* evaluations of several alternatives (Davis, 1976:246).

SEARCH

1. *Perceived risk (product related)* is positively associated with *extent of search* (Claxton, Fry, and Portis, 1974:42).
2. *Uncertainty (product related)* increases the amount of information *search* (Punj and Stewart, 1983:186).
3. The more visible a product is to significant others or *reference groups*, the greater the *perceived risk (product related)* and the greater the perceived need for additional *search* (Katona and Mueller, 1955:30-87; Engel and Blackwell, 1982:326; Bucklin, 1966:22; Katona, 1964:289; Moore and Lechman, 1980; Punj and Stewart, 1983:186).
4. The *extent of search* will vary directly with the *number of alternatives (market forces)* and the *perceived similarity between alternatives (product related)* (Granbois, 1971:185; Moore and Lechman, 1980; Bettman, 1979:135).
5. The *extent of search* will vary depending on the *perceived risk (product related) and perceived cost of search (market forces)* (Engel and Blackwell, 1982:327;Bettman, 1979:135; Bucklin, 1966:22).
6. The more *attribute sub-decisions (product related)* involved in alternative evaluation, the greater the *perceived risk (product related)* and thus the propensity to search (*extent of search*) (Engel and Blackwell, 1982:326).
7. The longer the *length of commitment (product related)* for the product, the greater the *perceived risk (product related)* and the propensity to search therefore, the *extent of search* (Engel and Blackwell, 1982:326; Katona and Mueller, 1955:50).
8. *Search* increases with the *importance of the decision (product related)* (Punj and Stewart, 1983:186).
9. The *propensity to search (personal factor) and the extent of search* increase as the

price of the product increases (Katona and Mueller, 1955: 30; Engel and Blackwell, 1982).

10. The greater the *interpurchase time (product related)*, greater the probability of *external search* (Engel and Blackwell, 1982:325; Katona, 1964:290).
11. The *extent of search* is influenced by the *complexity of the alternatives (product related)* (Bettman, 1979:135).

ALTERNATIVE EVALUATION

1. The increased threat of physical consequences (*perceived risk (product related)*) from the use of a product or service affects the individual's *attitude* toward the *information source (search)* (Engel and Blackwell, 1982:473).
2. It is most probable that *compensatory alternative evaluation strategies (choice heuristics)* will be used during a high involvement decision process *(product related)* (Engel and Blackwell, 1982:423).
3. The particualr *choice heuristic* used depends upon the *complexity of the alternative (product related)* (Bettman, 1979:227).
4. The higher the *perceived risk (product related)* involved, the more likely that there is an *increase and change in evaluative criteria* (Granbois, 1971).

SELECTION/INTENTION

1. Threat of social disapproval (*perceived risk (product related)*) affects the individual's attitude towards the purchase of the product or service (*intentions*) (Engel and Blackwell, 1982:474).

POST PURCHASE EVALUTATION

1. The less the *perceived risk (product related)* the higher the degree of *satisfaction* (Granbois, 1971).
2. The more complementary the *product* is to the *family's life style* the greater the chance of *satisfaction*.
3. The relationship between *demographic* variables and *satisfaction* will generally be weak and will vary widely over *products* (Day, 1978:357).

4. *Dissonance* is most probable when the *the decision is important, the alternatives not chosen are attractive and have desireable features, a number of alternatives are available and each alternative has a unique feature* (Granbois, 1971:190; Holloway et al., 1971:403; Engel and Blackwell, 1982).

P3 - Decision process variables on FMI

INVOLVEMENT/PARTICIPATION

1. *Family member involvement* seems to vary systematically at *different stages of the decision process* (Davis, 1976:246).
    a. In the *problem recognition stage*, the initiative usually lies with one of the members with *involvement* increasing during the *search stage* and decreasing during the *purchase stage* (Hansen, 1971:398-340).
2. Family member *involvement* in alternative evaluation will vary by *evaluative criteria* (Szybillo and Sosanie, 1977:49).

CONSENSUS

1. The amount of disagreement (*consensus*) will probably be relatively higher for the *alternative evaluation stage*, especially for the decision regarding the variety of *product related* attributes (*evaluative criteria*) (Belch et al, 1979:477).

ROLE SPECIALIZATION

1. *Role specialization* will vary across *stages of the decision process* (Davis and Rigaux, 1974:55; Bonfield, 1978; Szybillo and Sosanie, 1977:46; Engel and Blackwell, 1982:182).
2. Family *role structure* will vary over the process of evaluating and comparing *evaluative criteria* (Szybillo and Sosanie, 1977:46).

INFLUENCE

1. The family member's *perception* of who has *influence* changes across *evaluative*

criteria (Burns and Ortinau, 1978:376).

2. Family member *influence* varies by *stage of the decision process* (Hansen, 1972:401; Engel and Blackwell, 1982: 182; Davis and Rigaux, 1974:55).

P4 - Product related variables on FMI

INVOLVEMENT/PARTICIPATION

1. Family member *involvement* will vary widely by *product category* (Davis, 1976:246).
2. Where the *product* is age or sex related, the family may delegate the *search*, (ie. the number *involved*) (Davis, 1976:245).
3. The greater the *cost of the product*, the greater the tendency for two or more members to be *involved* in the decision (Jenkins, 1979:207; Granbois, 1971:196).

INTERACTION

1. In the alternative evaluation stage, the amount of *interaction* seems to depend upon the *importance of the decision (product related)* (Hansen, 1976:399).

CONFLICT

1. The amount of *conflict* varies across *product class* (Belch et al, 1979:477).

PATTERNS OF DECISION MAKING

1. Joint *involvement or participation (pattern of decision making)* increases with the *importance of the decision (product related)* (Wolgast, 1958:153).
2. The more *important and complex the alternative (product related)* the less likely that *autonomous decision making (pattern of decision making)* takes place (Melson, 1980:192)

ROLE SPECIALIZATION

1. *Role specialization* varies across *product or service* (Melson, 1980:183).
2. The more *important and complex the alternative (product related)*, the more the

family members will fulfill many consumer roles rather than specialize (*role specialization*) (Melson, 1980:183).

3. The higher the *perceived risk (product related)*, the more the family members will fulfill many consumer roles, rather than specialize (*role specialization*) (Melson, 1980:192).

INFLUENCE

1. Family member *influence* varies by type of *product* (Hansen, 1972:401; Woodside, 1972:659; Davis, 1976:245; Davis and Rigaux, 1974:51).
2. The family member's perception of who has *influence* changes across *products and evaluative criteria* (Burns and Ortinau, 1978:376).
3. The *importance of the decision (product related)* may determine the *amount and type of influence (influence strategy mix)* used by family members during a decision (Spiro, 1983:395).

This concludes the presentation and discussion of the current version of a model designed to explain family behavior during a consumer decision, especially the variation in family member involvement during the stages of a consumer decision. It is recognized that the process of building a theory is a continuous process and never complete (Calder, Phillips and Tybout, 1983) and that there is always room for refinement, extension and revisions. It is the view of this author, however, that this theoretical effort has resulted in the generation of an abundance of material and a challenge for future family consumer researchers such that the field of family consumer behavior will finally achieve the recognition and attention it so rightly deserves.

III. Related Literature Review

A. Introduction

The previous chapter was an extensive description of the most current version of a model designed to explain how the family behaves during a consumer decision with special attention on variation in family member involvement throughout the stages of the consumer decision process. This chapter will be a review of the literature that was consulted enabling the author to develop this model. The review of the literature is divided into five sections. The first section is a summary of the state of the art of the popular integrative models of consumer behavior. The second section concentrates on problem solving and decision making within a family system. The third section very briefly describes group decision making. Section four describes the process entailed in theory development. The fifth and last section explores the literature related to problems inherent to developing, refining and advancing a theory or model.

It is recognized that the usual nature of most theses entails the empirical testing of some aspect of an existing conceptual framework. Instead, this research involves the development of a conceptual framework that is to be tested in the future. Because of the distinctly converse nature of this research, a unique approach will be employed while discussing the review of the literature. Whereas the usual purpose of a literature review is to inform the reader of the current status of activities in the area being investigated (Kerlinger, 1973), the nature of this thesis necessitated an additional discussion of what specific portions of the literature review were integrated into the development of this model and why. It is anticipated that this approach will provide the reader with, not only a review of the relevant literature but also, a partial summary of the methodology involved in the development of the model.

This chapter is appropriately followed by the chapters on the methodology and the process of developing the current version of the model as seen in Chapter II.

B. Current Status Of Consumer Behavior Models

Within the last twenty years, marketing scholars have begun to develop models in hopes of explaining or predicting consumer behavior. Several models concerned individual decision making and a few were concerned with group or joint decision making. Several current consumer behavior models have been selected to demonstrate the direction of the work to date. These specific models were selected because it is believed they are good illustrations of the "state of the art" of integrative models of consumer behavior.

These models are presented in simplified form on the following pages. It is recognized in advance that to discuss the models out of context is insufficient and cannot do justice to the concepts actually developed by the researcher. Hence, the analysis related to each model presented is a brief summary and any reader who desires a complete description of any of these models is encouraged to consult the original sources.

The models to be discussed include the Nicosia model (1966); the Howard / Sheth model (1969, updated 1974); the Howard model (1977); the Sheth model (1974) and the EKB model (1982 version). The basic premise of each model will be outlined, coupled with its applicability to this current research endeavor as a conceptual framework.

Nicosia model - 1966

One of the earlier models of consumer behavior is the Nicosia (1966) model. Nicosia presented consumer behavior as a flow chart of decision sequences and divided the consumer decision process into four fields. In field one, the firm sends a product related message to which the consumer is possibly exposed. In field two, the consumer attributes interact with the message content and the consumer forms an attitude which may evoke search and evaluation procedures. At field three, the consumer is motivated to act and hence purchases the product. Field four includes feedback of purchase information to the firm and to the consumer. This feedback to field one may lead to modification of either the consumer's predisposition toward future purchases and / or of the firm's message.

The major drawback for this model is that the emphasis is on the *individual* consumer as a buying unit. Furthermore, the model assumes that the individual consumer has no prior attitude toward the firm or the product. It also assumes that the firm is introducing a new product. Finally, the Nicosia model focuses on the relationship between the firm and its potential consumers rather than on the consumer going through a decision process. These reasons, coupled with the criticism offered by Ward and Robertson (1973) that the Nicosia model consists of a long listing of variables that might possibly enter into a consumer behavior model with little, if any, explicit treatment of how they are related, makes this consumer model inappropriate for this research.

The Howard / Sheth model - 1974

The Howard / Sheth (1974) model is a model of consumer rational choice and is one of the first systematic efforts to develop a comprehensive theory of consumer behavior. The Howard / Sheth model of consumer behavior consists of four sets of constructs or variables. These are: 1) input variables, 2) output variables, 3) hypothetical constructs, and 4) exogencus variables.

The input variables are essentially the stimuli from the buyer's environment (either social or marketing). The output variables are the responses of the consumer. The hypothetical constructs are of two kinds: perceptual and learning, and they represent the internal state of the buyer. They are considered to be hypothetical because they are not observable but must exist for output to occur. The perceptual constructs serve the function of procuring and processing information relevant to the purchase decision. They include search for information, stimulus ambiguity, attention and perceptual bias. Learning constructs are seen as being the major components of decision making and they serve the function of concept formation. The learning constructs are confidence, motives, intenton, attitude, choice criteria, brand comprehension and satisfaction.

The exogenous variables provide a means of explaining interpersonal differences and influence the hypothetical constructs. The exogenous variables include culture, social class, reference groups, time pressure, financial resources, personality traits, importance of purchase, information available, media habits and direct motives.

Markin (1974), Cohen (1981) and Engel and Blackwell (1982) agreed that the Howard / Sheth model is one of the major contributions to the literature of consumer behavior. Although it has made a significant contribution to the understanding of consumer behavior, there are several reasons why it is not acceptable as a conceptual framework for this developing model of the family consumer decision process. For instance, the focal point of the Howard / Sheth model is on the brand choice behavior of a single, individual consumer. The model appears to be better able to explain choices between two brands of a product rather than decisions between alternative actions. More significantly, the model seems to be more applicable to individual buyer behavior than to decision making within the family. Furthermore, although the Howard / Sheth model includes extended problem solving behavior (to be discussed under the EKB (1982) model as high involvement) the focus is on repeat purchase behavior. In conjunction with these limitations, the model also fails to make allowances for product rejection or purchase postponement. Finally, the decision process is not as clearly delineated or emphasized as is the EKB (1982) model nor is there specification for *how* independent variables interact with dependent ones. For these reasons, the Howard / Sheth model is not being utilized as a base for this research which is an attempt to explain variations in family member involvement during the stages of the decision process for different products. Since the Howard / Sheth model best explains an individual buyer's brand choice decision, without emphasis on stages in the decision process or without concern for different product types, it is viewed as an unsatisfactory base for this current purpose.

Howard model - 1977

The Howard / Sheth model (1974) has evolved somewhat over the years, culminating in Howard's own model - the Howard (1977) model. This is another attempt to explain individual consumer behavior. Howards's approach in his own model is similar to that in the Howard / Sheth model in that he explained the dynamics of the buying process in terms of extensive, limited and routinized problem solving. Howard conceptualized the three levels of problem solving on the basis of brand and product class familarity. For example, a situation classified as extended problem solving is characterized by the individual's unfamilarity with either brand or product class. Limited problem solving involves a familiar product but unfamiliar brand. Finally, routinized problems concern familiar product and familiar brands. Howard assumed that cognitive processes always precede behavior rather than follow it. The critique for the Howard / Sheth (1974) model is applicable for the Howard model as well, hence this model is also not suitable for this research endeavor. A concept from the Howard model that will be used is extended problem solving and will be discussed in the EKB (1982) model as high invovement.

Sheth family model - 1974

A problem exists for consumer researchers because, although many purchase decisions are family decisions, most research about consumer behavior has been conducted with individuals (Engel and Blackwell, 1982: 174). Family decision making and role structure studies were initially conducted mostly by sociologists. In recent years, consumer researchers have added to this literature (Engel and Blackwell, 1982). Sheth is a consumer researcher who has contributed to family decision making literature from a consumer perspective.

In summarizing his model of family buying decision, Sheth (1974) considered four major components: 1) the consumption behavior of the family, 2) two types of buying decisions, 3) the determinants of the two types of buying decisions, and finally, 4) the individual family member's predisposition towards specific products, ie. his / her cognitive world. Each component will be discussed.

Sheth conceptualized consumption as being carried out by a) the individual member, b) the family as a group, or c) the family indirectly in their process of living in the household shelter unit.

Sheth saw family consumption behavior as a result of family decisions, of which there are two types - autonomous (a single member) or joint (several or all family members). He believed that there is no one-to-one correspondence between the type of consumption and the type of family decision making ie. an autonomous decision does not indicate use by a single member, nor does a joint decision imply consumption by all family members.

Sheth (1974) therefore considered it critical to examine the determinants of whether a family buying decision is joint or autonomous. In his 1974 model he indicated seven determinants of joint versus autonomous decision making - social class, life style, role orientation, life cycle, importance of purchase, perceived risk and time pressure. Sheth maintained that the first four are family-specific while the last three are product-specific.

Sheth recognized, in his model, that individual family members will have differing predispositions and these are seen as being the function of buying motives and evaluative beliefs. He further posited that three sets of factors govern these buying motives and evaluative beliefs. These three factors are 1) exogenous constructs (sex, personality, confidence, reference and peer groups, life style and role orientation), 2) information from a variety of sources coupled with the extent of overt search and sensitivity to information; and 3) family member interaction and influence.

Although this model is oriented to the family as a buying unit, there are two paramount reasons why it is not deemed suitable as the conceptual framework for this research. First, Sheth (1974) does not delineate the stages in the decision process. Secondly, his main concern and focus is whether the family buying decision is joint or autonomous and if joint, what determines joint decision making and what strategy is used to reduce the conflict inherent in joint decisions. Regarding the latter, Sheth suggested four forms of conflict resolution - problem solving, bargaining, persuasion and formation of coalitions. In comparison to Sheth's approach, this effort is concerned with what causes variability in family member involvement during the different stages of the consumer decision process. Hence, Sheth's family model is not considered adequate for this research, even though it is a family oriented model.

The EKB model - 1982 version

The Engel, Kollat and Blackwell model (hereinafter known as the EKB model) is another attempt to provide insight into the process of consumer decision making (Engel and Blackwell, 1982). In an effort to encompass as many different purchase situations as possible, Engel and Blackwell differentiated two distinct conditions of purchase - high involvement and low involvement.[3]

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[3] This dicussion of the EKB model would not be complete without brief mention and clarification of the concept of low involvement, see pages 34-38 in Engel and Blackwell, 1982. Decisions that are not high involvement are made quite differently since it is not an extended problem solving situation. The stages include problem recognition, a choice (select and purchase) and then, evaluation of the chosen product only after use or consumption. There is low perceived risk, low anxiety about outcomes and little

A discussion of high involvement decision making follows.

According to Engel and Blackwell (1982:24), high involvement is defined as "the activation of extended problem solving behavior when the act of purchase or consumption is seen by the decision maker as having high personal importance or relevance". A high involvement situation requires that the purchase or use of the product or service in question affects the consumer's ego and self-worth in some way. Whether or not a product or service has this effect is generally determined by the presence of one or more of the following:

1. high price of the product or service
2. complex features
3. large difference between alternatives
4. high perceived risk of making an incorrect decision and,
5. strong outside reference group influence and motivation to comply with pressures.

As an observer of consumer behavior, it is often simple to determine if a particular situation is a high involvement one. This can be distinguished if there is a high number of product attributes being weighed and evaluated by the consumer, and if there exists a narrow range of acceptable values for each of these attributes.

A further important aspect included in the definition of high involvement is extended problem solving behavior. Extended problem solving is basically the same process as that used as the core of the EKB model's decision making process. The core of the EKB model decision process is composed of five phases:

1. problem recognition
2. search
3. alternative evaluation
4. choice
5. outcomes of choice (dissonance and satisfaction).

The EKB model highlights the stages in the decision process. It also explicitly includes the relationships of the Fishbein (1975) behavioral intentions model under alternative evaluation. The EKB model also goes into detail, specifying the steps that occur between the stages of exposure and memory retention through the process of

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[3](cont'd)personal relevance. No search is entailed because the costs would outweigh the benefits. An example of a low involvement purchase is that of buying floor wax.

information processing. They believe this inclusion is consistent with the current focus in consumer behavior on information processing, especially by Bettman (1979).

There are basically five components in the EKB model:

1. input
2. information processing
3. decision process
4. decision process variables
5. external influences.

The information processing component under high involvement consists of the consumer's selective exposure, attention, comprehension, yielding/acceptance and retention of product or brand information from the marketing and non-marketing sources (input stimuli). This component of the EKB model covers the conceptual understanding of how people process incoming information.

The phases in the decision process component have been previously outlined. Problem recognition is a perceived difference between the ideal state of affairs and the actual situation, sufficient to arouse and activate the decision process. Once a problem is recognized, the consumer must decide what to do. The initial step is an internal search within memory to determine whether or not enough is known about alternatives to permit some kind of choice. If this internal search proves nonproductive it will probably be necessary to turn to an external search, making use of a variety of information sources. In high involvement decision making, the consumer then compares the information gained through the search stage so as to evaluate the competing alternatives. During this comparison of alternatives, beliefs are formed. Beliefs are whatever the individual holds true about the various alternatives in terms of the standards being utilized. Once beliefs have been formed or changed, attitudes toward the act of purchasing a given alternative will change, if other factors remain constant. If the attitude is favorable (ie. potential positive consequences of buying and using a particular alternative), it is then followed by formation of a purchase intention - the subjective possibility that a given product or service will be purchased.[4] The next phase, choice, entails purchase of the chosen alternative. Choice is the outcome of two determinants - intention and unanticipated circumstances. The EKB model of high involvement decision behavior is completed by adding the fifth phase - outcomes of choice. Following the actual choice of a product or service, the consumer will experience one of two outcomes - satisfaction/ dissatisfaction or dissonance. (Dis)satisfaction is an evaluation that the chosen product is (not) consistent with prior beliefs with respect to that alternative. Dissonance is the post-choice doubt that the alternative chosen was the best choice. With the outcomes of choice, the description of the decision process component is complete. It must be stressed, however, that this decision process does not depict a linear relationship between the variables. There is constant feedback occuring throughout the process. This inherent feedback mechanism illustrates the dynamic process involved during a consumer decision.

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[4] This is the specific inclusion of the Fishbein (1975) behavioral intentions model (beliefs, attitudes and intentions).

The fourth component of the EKB model, the decision process variables, includes motives, evaluative criteria, life style, normative compliance and informational influence. These affect various phases in the decision process component, both directly and indirectly, through the behavioral intention paradigm (ie. beliefs, attitudes and intentions).

Correspondingly, the fifth and final component of the EKB model, external influences, also influence the consumer indirectly at various stages of the decision process. The external influences noted are cultural norm values, reference groups, including the family, and unanticipated circumstances. These factors serve as intervening variables that may block, alter or influence the consumer decision making process.

An extended description of the five components of the EKB model was offered because the EKB model will jointly serve with the Kieren, Vaines and Badir (1982) problem solving model (explained in the next section) as the basis for the core of the conceptual framework for this developing family model. Specifically, the decision process component (comprised of the five decision stages) will be the most relevant component. Admittedly, the EKB model embodies the same limited orientation as the other consumer models - ie. it was designed to explain individual consumer behavior and regards the family as an external influence on the individual. However, its inclusion of the distinct stages of the decision process, its reference to high involvement, extended problem solving as well as the incorporation of the Fishbein (1975) behavioral intentions model, merits its use as part of this developing family model.

C. Family Problem Solving

This section of the literature review will deal with several interrelated issues. The discussion will begin with a comprehensive definition of a family, continue with an elaboration of the concept of a family as a system and conclude with a portion on problem solving within a family system. Included in the discussion, will be a recounting of the Kieren, Vaines, and Badir (1982) family problem solving model and explication of its relevance to this current research.

Family - Defined

Hook and Paolucci (1970:316) defined a family as "a corporate unit of interacting and interdependent personalities who have a common theme and goals, have a commitment over time and share resources and living space". Andrews, Bubolz, and Paolucci (1980:31) offered a comparable definition. They defined a family as "a bonded unit of interacting and interdependent persons who have some common goals and resources, and for part of their life cycle, at least, share living space." On a similar note, Hawley (1950) proposed that a family was a relatively small association of individuals, differing in age and sex, who, as a result of their close physical association in a common residence and their mutually sustaining activities, form a distinguishable entity or unit within a larger aggregate. The American Home Economics Association (1975:26) defined a family as "a unit of intimate, transacting and interdependent persons who share some values and goals, resources, responsibility for decisions, and have a commitment to one another over time".

An examination of these family definitions reveals several congruencies. There appear to be several prominent characterisitcs that identify a family. Families share resources and a common residence over time. They are readily recognized by others as a distinguishable entity within a larger aggregate. A family is composed of a small number of individual persons. differing in age and/or sex. These individuals interact with each other and are interdependent. Finally, families have a mutual theme, plus common goals and sustaining activities. Aldous (1971:266) supported the premise that these congruencies are common attributes of a family and constitute a comprehensive definition of a family.

Family As A System

There are several elements considered pertinent to a discussion related to the family as a system. First is a brief deliberation on general systems theory, which will include explication of its basic components. This will be followed by an application of the general systems theory to the study of the family, culminating in a discussion of the family as a system and its relevance to this research.

General Systems Theory

The primary unit of analysis for a systems theorist is the system. Hall and Fagan (1956) defined a system as a set of objects together with relationships between the objects and their attributes. The basic components of a system, as explained by Buckley (1967), are boundary, subsystem, open/closed system, input-throughput-output, and feedback. Each of these components will be briefly defined:

1. Boundary - that which delineates the elements belonging to the system and those belonging to its environment.
2. Subsystem - an interrelated element or component of a system having a boundary and a functional unity within a larger system.
3. Open/closed system - an open system utilizes input information from other systems outside of it as well as information which it generates itself. On the other hand, a closed system has relatively impermeable boundaries and exchanges little information with outside systems.
4. Input-throughput-output - Input is a stimulus from the environment which enters a system. The output is the response of a system back to the environment. The process of changing the input into output is called throughput (Deacon and Firebaugh, 1981) or rules of transformation.
5. Feedback - is the information transferred back to a system as a result of that system's behavior. Deacon and Firebaugh (1981) confirmed Buckley's (1967) definition of feedback by claiming that feedback is information about outputs that reenter the system as inputs. They continued with an explanation of positive and negative feedback. Positive feedback is informational input that indicates that the system may benefit from change and should institute a new course. Negative feedback, on the other hand, is informational input which indicates that the system is

deviating from a prescribed course and should readjust to a new steady state.

General systems concepts applied to a family

Kieren, Vaines and Badir (1982:38-52) provided a succinct yet comprehensive description of systems theory applied to the family. Similarily, Deacon and Firebaugh (1981) also offered a concise and comprehensive attempt to relate systems theory to the family. They saw the family as an open system, since it interrelates continually with its environment and depends upon its environment. They conceptualized the inputs entering the family system as resources and demands. As the family uses the resources to meet the demands, through the process of throughput, both used resources and met demands leave the family system and enter the environment as outputs. Deacon and Firebaugh posited that the family which recognizes and responds to positive feedback is an adaptive and growing system. On the other hand, negative feedback is seen to function as a stabilizer and facilitates system maintenance. They pointed out that most families strive to strike a balance between the two types of feedback processes. Further, they conceptualized the individual family members as subsystems. Finally, they saw two fundamental subsystems, the personal subsystem and the managerial subsystem. The former encompasses interpersonal relations, family maintenance and personal development (see also Aldous, 1971). In the latter, the family resources are used to meet the goals of the total system.

Aldous' (1971) approach was similar to Deacon and Firebaugh's (1981) approach. She asserted that the whole notion of the family as a group whose actions feedback and lead to changes, is particularly appropriate to today's family. Aldous saw the family as a self-organizing system, constantly changing and elaborating behavior in response to selective aspects of the external environment and demands of its own members.

The systems approach contrasts sharply with the static view of the family being composed of occupants largely playing normatively prescribed roles. In his decade review of the 1960's, Broderick (1971) suggested that borrowing the conceptual tools of the systems theory so as to approach the family as a complex system would be a viable strategy to promote family research (see also Broderick and Smith, 1979). This notion of a family system is supported by the literature. Hook and Paolucci (1970), Compton and Hall (1972), Paolucci, Hall and Axinn (1977), and Andrews, Bubloz and Paolucci (1980) have supported this assertion of a system within a system through their adoption of an ecological approach to the study of the family.[5] Andrews et al.(1980) and Nickell, Rice and Tucker (1976) explained that an ecosystem is a name for the relationships between living things and their environment or the habitat which surrounds them throughout their life cycle. A family ecosystem is defined as "the reciprocal relations of family to its natural and man-made environments, the effect of these singly or in unison as they shape the internal functioning of families, and the interplays between the family and other social institutions and the physical environment" (The American Home Economics Association, 1975:26). Paolucci et al.(1977) endorsed the premise that families are in constant interaction with the environments that surround them and confirmed the assertion that families can be called ecological systems or ecosystems.

The above noted support from the literature allowed this researcher to assume that families function as a system within a system and enabled the researcher to incorporate the family system as an underlying and implied concept in the developing family consumer decision process model. Hence, the middle circle in the model is called the *family system*.

Problem Solving Within A Family System

Kieren, Vaines, and Badir (1982) maintained that problem solving is a process of the family system. Their view is similar to Paolucci, Hall, and Axinn (1977) who asserted that decision making is the central activity of the family system and part of problem solving. The process of making decisions and acting on them links the family system to their environments. Deacon and Firebaugh (1981) believed this link occured because decision making involves processing information from the environment.

Before expounding the features of the Kieren, Vaines, and Badir (1982) problem solving model, it seems expedient to define problems, problem solving and decision making. A problem is defined (Klein and Hill, 1974:495) as "any situation involving an unachieved but potentially attainable goal in which the means for overcoming barriers to achieving the goal, though not immediately apparent, are considered feasible". This definition is supported by such researchers as Kieren, Marotz, and Henton (1975) and Tallman (1970).

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[5] Heck and Douthitt (1982) offered a comparison of the conceptual frameworks of Deacon and Firebaugh (1981) and Paolucci, Hall and Axinn (1977), who both conceptualized the family as a system operating within a system by managing itself to meet its internal needs in response to the changing external requirements of the large environment in which the family operates.

It seems relevant to clarify the meaning of a problematic situation. Tallman (1970) and Engel and Blackwell (1982) discussed the characteristics of a problematic situation: 1) it cannot be handled by an habitual response, 2) there is some uncertainity as to what action should be taken to achieve the goal and; 3) the outcome is not assured; rather there is some question about what will happen (Kieren, Marotz, and Henton (1975); 4) the situation provides new or modified conditions so that solutions are not immediately apparent and finally, 5) any barriers or obstacles in the way must be overcome if the goal is to be reached.

Engel, Kollat and Blackwell (1978) defined problem solving as a positive means of coping with situations in which some barrier is present and yet some solution is feasible. The positive attribute of problem solving is also addressed by Sheth (1974), Kieren, Marotz, and Henton (1975) and Tallman(1970), who agreed that problem solving is a positive, goal directed activity and refers to those behaviors which individuals or groups choose and implement in order to achieve desired ends.

Decision making and problem solving are terms that are often used interchangably. However, decision making is seen by some to be part of the problem solving process (Kieren, Henton and Martoz, 1975). Paolucci, Hall and Axinn (1974:94-95) defined decision making as

> "... a process of reducing dissonance between the family and its environment. ...It consists of a method by which alternative courses of action are evaluated subsequent to recognition of a need for a solution to a problem... . It terminates in a commitment to one alternative that either has been selected from among acceptable alternatives or determined by melding different alternatives so that a new one emerges. The process is dynamic but exhibits continuity of time and interest. The continuity is evinced by the flow of thoughts, ideas, facts, and feelings (information) over time. *The process has movement*."

> Gross, Crandall and Knoll (1973:215) described decision making as "a process consisting of the activities which lead up to or result in the choice of an alternative or the committment to a course of action. The process is not however, a rigid set of steps. The decision maker, whether an individual or a group, may skip back and forth among the activities, may emphasize one more than another at different times or with different kinds of decisions, and may repeat some activities several times before finally committing her / himself to a course of action. The process may take place a long or short time in relation to a single decision, but the result is not considered to be a true decision unless there is evidence of deliberation."

This researcher recognizes that although some authors assume the narrow perspective that decision making is a step in the problem solving process (Aldous, 1970), this author has adopted a wider, more recognized perspective. For this research purpose, the author regards decision making as a process itself instead of an isolated act within the problem solving process. Hence, the seven stages of this model are parallel to the EKB ([illegible]82) five stage decision process as well as the Kieren, Vaines and Badir (1982) eight stage problem solving process.

Kieren, Vaines, and Badir (1982) - Problem Solving Model

Kieren, Vaines, and Badir (1982) viewed problem solving as a process of the family system. More specifically, the family problem solving process is depicted as eight steps (Figure III.1):

1. identification or recognition of the problem
2. restatement or formulation of a goal or goals
3. assessment of resources
4. generation of alternatives
5. assessment of alternatives
6. selection of alternative
7. action or implementation of alternative
8. evaluation of action and process.

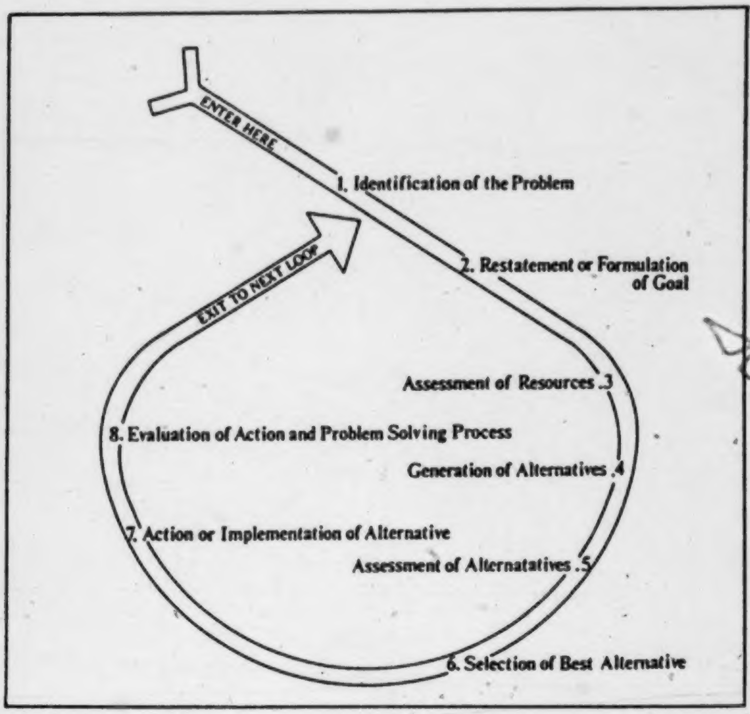
ENTER HERE
1. Identification of the Problem
2. Restatement or Formulation of Goal
Assessment of Resources .3
Generation of Alternatives .4
Assessment of Alternatatives .5
6. Selection of Best Alternative
7. Action or Implementation of Alternative
8. Evaluation of Action and Problem Solving Process
EXIT TO NEXT LOOP

Figure III. 1

Problem Solving Loop from Kieren, Vaines and Badir, 1982: 143 - Unpublished Manuscript

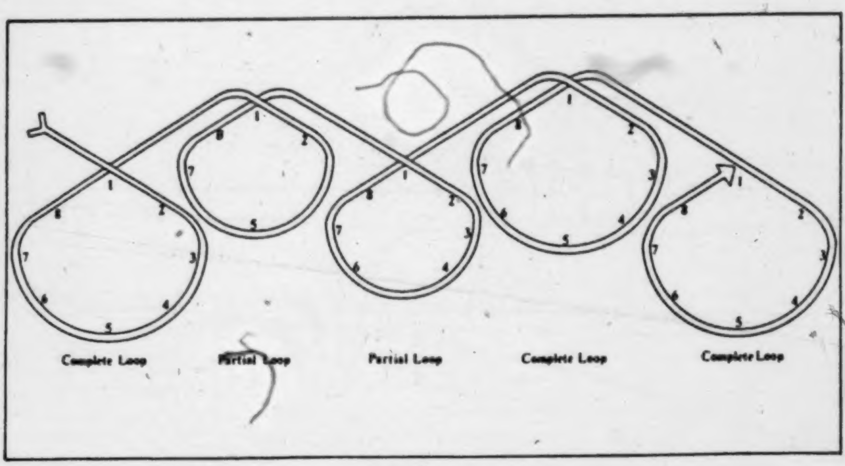

Figure III.2

On Going Problem Solving Process from Kieren, Vaines and Badir, 1982: 145 - Unpublished Manuscript

The reader is referred to the source (Kieren, Vaines, and Badir, 1982: 136-139) for more thorough discussion of the steps. In essence, the steps are self-explanatory and consistent with the EKB (1982) model of high involvement, extended problem solving. It should be noted that the Kieren, Vaines and Badir model includes the explicit step of evaluation of the process (see step 8). The EKB model does not make this procedure explicit due to the marketing perspective (ie. these authors are interested in the outcome ((dis)satisfaction, dissonance) rather than an evaluation of how the individual or family felt about their behavior during the process). However, evaluation of the process implies that families consider not only their (dis)satisfaction with their purchase, but also their performance and behavior throughout the process of making their decision. This concept of self evaluation accompanied with product and outcome evaluation extends the depth of the process and will be incorporated into this model as part of the post purchase evaluation stage.

Another aspect of the Kieren, Vaines and Badir (1982) model that will be incorporated into the conceptual framework of this model, but will not be explicitly illustrated on the model, is the concept of the problem solving loop. This will enable depiction of the family's movement through the problem solving process (Figures III.1 and III.2). Kieren, Vaines Badir (1982) advocated that during decision making, one step flows into another. They felt that one way to conceptualize and visually represent this ongoing process was to use a circular loop. This loop indicates the movement that is apparent in dynamic, human problem solving and also indicates the flexibility and uniqueness of the human in implementing a shortened or lengthened process, depending on the problem. While the more complex and important problematic situations probably involve the entire problem solving loop, the authors asserted that many situations, because they are similar to others previously handled, call for partial versions of the loop. In a partial loop, some of the eight steps may be compressed or skipped completely. This approach is conceptually similar to EKB's high and low involvement situations, as is Kieren, Vaines and Badir's (1982) representation that the loop is reflective, ie. what happens at any step can feedback to earlier steps and can provide input into future problem solving.

Finally, because problem solving goes on continually in a family system, Kieren, Vaines, and Badir (1982) depicted family problem solving as a coil or spiral composed of ongoing, separate, problem solving loops. Some of the loops of the coil are complete (ie. they require all eight stages because the problem has not been previously encountered) while other loops are partial or compressed (Figure III.2).

The Kieren, Vaines, and Badir (1982) concept of a problem solving loop will be a partial base for this developing family consumer model for several reasons. First, it is conceptually similar to the EKB model, which is also being used as a base for this model. Second, it explicitly expounds the notion that family decision process is an ongoing, dynamic, complex process. Third, and most important, it is based on both the general systems theory and the ecological approach which both maintain that a family is a system acting within a system. This systems concept enables one to assume that indeed, variation in family member involvement during a consumer decision is affected by the family as a system operating within its own environment and within the larger aggregrate system of society.

D. Group Decision Making

As was noted before, much of the literature in consumer behavior is oriented towards the study of the individual consumer with the family as a reference group exerting influence on the individual (Wind, 1978b; Engel and Blackwell, 1982). Further, when the husband/wife dyad were studied, often only the wife's responses were obtained and analyzed (Melson, 1980; Engel and Blackwell, 1982). Several researchers have suggested that it is desireable to change the unit of analysis in family consumer research from the individual to the family as a unit (Wind, 1978b; Engel and Blackwell, 1982).

It is recognized that family decision making is a form of group decision making (Melson, 1980). And, although appropriate, a thorough review of the group decision making literature is not within the confines of this research. It is necessary, however, to acknowledge that family decision making is different from that of other groups.

Both family sociology and organizational buying researchers have investigated group decision making. A limitation of the group decision making literature in sociology is that the research is most often based on *ad hoc* groups (Tallman, 1970). Tallman (1971) implied that findings based on ad hoc groups should also be true for families. This researcher disagrees with this implication because ad hoc groups have different characteristics from a family group. For instance, ad hoc groups have no history as a problem solving unit, have no assumed role structures, are often studied within an artifical setting, are usually of temporary duration and are made up of persons in similar age brackets with comparable abilities (Tallman, 1970:94). On the other hand, the family has an age and sex distribution, and operates with a history and a future (Tallman, 1970:94). In fact, Tallman (1970) stated that attempts to replicate small, ad hoc group research with families failed to support the original findings.

Research on organizational decision making, on the other hand, has utilized intact, small groups who have a history (albeit sometimes limited) as a decision making unit (Wind, 1978b; Johnson and Bonoma, 1981). Consequently, Wind, although he did not develop a conceptual framework, did suggest that the concepts related to organizational buying behavior could potentially be implemented when analyzing the family as a multiperson buying unit.

There are several notable differences, however, between the family unit and an organizational buying center that complicate superimposing the organizational theory onto the family unit (just as there were differences between ad hoc groups and family groups). For example, in a family purchase different members are involved for different products while basically the same members are involved for each similar buying decision within an organization. There are a diffuse amount of sellers who rely upon the family as a buying unit while in contrast, the organizational group relies upon only a few suppliers. Each member of the organizational buying center has a specific skill and the members do not switch around for each purchase whereas all family members have dissimilar skills which can be allocated to the advantage of the family. Organizational buying centers have specific buying problems to solve and they deal with each one as they did in the past (if applicable). In other words, they are problem oriented while families are described as more solution oriented. Organizational buying centers are manipulating company funds whereas families are using the financial resources they themselves have earned and accumulated. This discrepancy may affect the rationale behind proper utilization of the available funds.

In summary, although family groups, organizational buying groups and ad hoc groups are each, by nature, multiperson decision making units, there are discernible differences in their structure, interaction patterns, goals, motives, history, and future. This research is concerned with the family as a multiperson decision making unit. The researcher wishes to acknowledge that although the family is a group and their decision process is a form of group decision making, the process within the family is not interchangable with those within ad hoc or organizational buying groups.

E. Theory Development

Metatheoretical Issues

In a review of a workshop on family theory construction, Burr, Hill, and Klein (1973) recounted that there was a rapid increase in attention being given to theory building in the social sciences seeking to explain family phenomena, but that very little had been collectively written about how theorists actually go about the process of building theories. Burr et al. (1973) claimed that those theorists that do attempt to build theories, invariably encounter several metatheoretical issues in their endeavor. These include:

1. questions concerning the nature, function and purpose of a theory;
2. various strategies of theory building based upon inductive and deductive reasoning;
3. the components and essential elements of theory structure;
4. informal and formal modes of theory expression utilized while presenting a theory;
5. what criteria should be used to evaluate a theory.

This literature review will address each of these metatheoretical issues. Before doing that, it is interesting to note that a researcher, while developing a theory or model also has other factors to consider. They may have to deal with areas other than the metatheoretical issues. These areas may include the process of conceptual development and refinement, trying to inductively generate theory from empirical data, reworking theory from a related discipline, reworking theories in the light of new conceptual developments and empirical data, borrowing theory from a related discipline, deducing more specific theoretical ideas from an abstract, context free theory and finally, assessing the evidence of empirical tests of theory. In conclusion, the theorist has many analytical and evaluative issues to recognize while attempting to build a sound theory or model.

Nature of Theory

Theory Defined

The first metatheoretical issue to be examined is the nature, purpose and function of a theory. This issue was addressed by Zetterberg (1965), later by Mouly (1978), Kidder (1981) and also by Kerlinger (1973). According to Kerlinger, the basic aim of science is to explain natural phenomena. Such explanations are called theories. Kerlinger comprehensively defined theory as an interrelated set of concepts, definitions and propositions that present a sytematic view of some phenomenon. Kerlinger held that this definition says three things: 1) a theory is a set of propositions consisting of defined and interrelated constructs, 2) a theory sets out the interrelations among a set of variables and in doing so, presents a systematic view of the phenomena described by the variables and, 3) a theory explains a phenomena by specifying what variables are related to what variables and how they are related, thus enabling the researcher to predict from certain variables to certain other variables.

Purpose Of Theory

Theories exist for several reasons. The underlying goal of a theory is to make sense of the real world (Aldous, 1970) by explaining what causes an event and why it is associated with another event (Reynolds, 1971). Theories enable researchers to organize empirical knowledge concerning a phenomenon into an internally coherent and meaningful structure (Mouly, 1978). This permits the examination of hypothesis resulting in new perspectives towards a phenomenon (Aldous, 1970). Theories also direct research, are useful in interpreting findings and in selecting strategies for research (Sternthal and Craig, 1982). The major purpose of a theory is to explain the circumstances under which variation in some variable influences variation in other variables (Burr, 1973). Bennett (1977) also suggested that theories can simplify or reduce the complexity of the phenomena in question and can provide an understanding of a full range of phenomena that may never be directly observable.

Functions Of Theory

It is generally agreed that the functions and benefits of a theory are that they are able to describe, explain, predict and control. Not all useful theories perform these functions equally well. Some theories only describe, without being explanatory, predictive or controlling. Other theories may perform all four functions. Each of the functions of theory is clarified in the following material:

Descriptive theory - Several authors have explained descriptive theory (Reynolds, 1971; Walters, 1974; Runyon, 1977; Loudon and Della Bitta, 1979). Collectively, they asserted that descriptive theory systematizes the process into steps and describes a phenomena or several phenomena, thereby providing a better understanding of its nature and occurance. This type of theory accepts the world as it finds it and deals with behavior as it exists. A theory must be explicit in its description via necessary detail with terms selected to ensure that the "audience" agrees on the meaning of the concepts.

In essence, a descriptive theory does not attempt to break new ground or extend knowledge, rather it is designed to describe some aspect of a phenomenon. Hence, such descriptive theories generally do not explain or control, although they may have aggregate predictive properties.

Predictive Theory - Kerlinger (1973), Runyon (1977) and Loudon and Della Bitta (1979) agreed that a predictive theory allows us to predict what will happen in the future provided certain specified conditions are met. Predictive theories enable us to fortell events. When we are able to declare more, complex propositions from the primary propositions of a theory, we are, in essence predicting.

Explanatory theory - Loudon and Della Bitta (1979) acknowledged that although it is possible to predict events without understanding their causes, knowing why something happens greatly enhances our ability to predict its occurence. According to Runyon (1977), an explanatory theory specifies sufficient causes necessary for a phenomenon to occur, ie. it tells us why something happens. Such theory provides insight into the behavior or phenomenon. An explanatory theory enables us to understand the underlying cause of some event or activity and consists of a set of statements about the relationships between the various elements comprising a phenomena and about the relationships exisiting between that phenomena and others in the universe.

Control theories - Control, the ability to regulate and influence what will happen in the future, is the ultimate goal of science. This approach assumes that if we control all of the relevant factors surrounding the occurence of a particular phenomenon, we can control the occurence of that phenomenon (Runyon, 1977; Loudon and Della Bitta, 1979).

In summary, Runyon (1977) submitted that the requirements of the individual user of a theory will determine the function and level of theory performance that is considered acceptable and appropriate. Those that need to gain insight into human behavior will probably be satisfied with descriptive and explanatory theories whereas pure scientists will seek the predictive and controlling theories. This does not mean that theories are either good or bad, rather they are simply appropriate or inappropriate for the researcher's purpose.

Strategies of Theory Building

The second metatheoretical issue concerns the strategies available with which to build theories. Burr (1973) held that it is possible to view theory building with varying degrees of breadth - from narrow to broad to all inclusive. When it is viewed in a very narrow sense, there are several specific strategic goals: invent new theory; extend an existing theory; integrate theories that have not been previously combined and modify existing theories by reworking them in the light of new information. When theory building is viewed in a broader sense - beyond invention, extension, integration or modification - theory building strategies also include conceptual development, gathering data, improving data retrieval systems and improving measuring instruments. When theory building is viewed in its more inclusive sense, all of these eight strategies are genuine methods of theory building.

Burr (1973) discussed an existing taxonomy of theory building strategies founded primarily on two reasoning strategies - inductive and deductive.

Inductive Strategies of Theory Building

Inductive reasoning, according to Burr(1973), is using ideas that are relatively specific and concrete to generate new ideas of a more general and more abstract nature. Lazer (1962) explained that the researcher begins with a specific real world situation, abstracts it to a general theory and tests the theory for soundness. There are three strategic approaches that can be employed to develop a theory if inductive reasoning is used: a factor theory approach, grounded theory and codification.

Factor Theory - Aldous (1970) addressed the issue of factor theory and explained that if a researcher is utilizing a factor theory strategy, s/he must start from scratch to create relevant variables. The investigator has a number of statements "set side by side" each containing the effect of a given factor on some consequence common to all of the statements. The investigator then derives a more specific proposition as to the combined effect of all of the variables. This is appropriate to family studies because most family phenomena are affected by a number of variables instead of just one variable. Should a researcher opt to elect this strategy, s/he would ask themself the following questions: 1) What are the important variables?, 2) Must the variables be of a certain magnitude to have an effect on the operationalized phenomena?, 3) What is the sequence of the effect? and, 4) Do the variables operate alone or in interaction with others?

Grounded Theory - Glazer and Strauss (1967) and Aldous (1970) described the second inductive strategy - grounded theory: by immersing oneself in his/her data, rather than relying upon the literature in the study area, the researcher distinguishes common characteristics that enable him/her to delineate new concepts appropriate to the richness and complexity of this data. With these emergent concepts, the investigator can establish relationships among them, thereby setting up hypotheses. After a theory has been developed that adequately reflects the data, its hypotheses can be tested with other samples.

Codification - A third inductive approach is that of codification. Merton (1968) reported that this strategy of theory building consists of the process of systematizing available empirical generalizations in such a way that findings that were deemed to be apparently different, are used as a common basis for inducing new theoretical propositions.

Deductive Strategies of Theory Building

Lazer (1962) asserted that the converse of inductive reasoning is deductive reasoning. In the former, a researcher begins with a specific real world situation and abstracts it to a general theory. Lazer indicated that in deductive reasoning the opposite occurs: the researcher begins with a general abstract theory and then seeks a real world situation in which to test the theory. Burr (1973) offered a more complicated definition - deductive reasoning is seen as the process of identifying relatively abstract, general propositions and then building new theory by the logical process of deducing from these general ideas, propositions that have not been previously identified. The theoretical statements that the researcher uses in the deductive reasoning approach consists of a set of propositions that are internally consistent with each other (Lazer, 1962; Walters, 1974). There are two strategies or approaches to building a theory founded on deductive reasoning - borrowed theory and axiomatic theory.

Borrowed Theory - Aldous (1970) outlined the borrowed theory strategy as being the process of building theories by borrowing propositions from other areas within the discipline, as well as from other disciplines. This entails trying to link their findings with the relevant discipline in question. This is an especially relevant form of building theory if there exist some sketches of theories which lacked empirical support but which would benefit from being joined with a particular area of study. Sprey (1970) cautioned that borrowing from other fields is a good idea as long as we know what to borrow. Burr (1973) further cautioned that borrowing just concepts does not constitute building a theory, it only increases the size of the conceptual taxonomy. He added that propositions, not just concepts, are necessary to build theories and reaffirmed the conviction of Sprey that researchers must borrow propositions instead of just concepts.

The current research did admittedly entail extensive borrowing from other disciplines and this may well be a relevant criticism of this model. But, as Sheth (1974) suggested, the practice of conceptual borrowing helps a discipline (for example, that of family consumer decision making) get off the ground, build faster and mature more quickly. In due time, it will be necessary to begin to generate constructs uniquely suited to the family consumer behavior discipline (Sheth, 1974; Olsen, 1981).

Axiomatic Theory - The other deductive approach is axiomatic theory[6]. The procedure utilized for developing an axiomatic theory is discussed by several researchers. Aldous (1970) explained that during the development of a deductive theory, the investigator selects some area of interest, searches the literature and tries to summarize the findings in a number of propositions, noting the degree of empirical support there is for each proposition. Then the researcher seeks to develop a smaller set of hypotheses that can serve as premises for the theory through judicious use of more abstract concepts which will encompass the original set of propositions. Burr, Leigh, Day, and Constantine (1979) added that the theory, when completed, will consist of a set of carefully defined and logically interrelated concepts and propositions that are used for the basis for explanation, prediction and control or intervention in specific situations. The concepts in the conceptual framework are the terms that are used in propositional statements. The concepts are not the theory itself. One may have concepts and good definitions of them but until one has propositional statements about the relationships between the concepts, one does not have a usable theory.

The model was predominantly developed using an inductive approach, especially the factor theory approach. That is, the developmental process was one of reasoning a part or parts (ie. all of the variables) into a whole (ie. a conceptual framework capable of illustrating the relationships between the variables in the form of propositions). The developmental process also involved borrowing concepts and propositions. This tactic strengthened the internal consistency of the conceptual framework and allowed for the accumulation of an abundance of documented propositions. This initial inductive process should then be followed by the logical process of deducing, from this conceptual framework, new propositions that have not been previously identified. It is recommended that this deductive process be considered an important and necessary task for future revisions and expansions of this process model of family consumer decisions.

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[6] The axiomatic approach is also referred to as formal theory and/or deductive theory and these three terms may be used interchangeably.

Components Of A Theory

Subsequent to defining a theory, stating its purpose and functions and elaborating on the various developmental strategies, is the third metatheoretical issue - the components and elements of theory structure. The description of deductive or axiomatic theory in the previous section is nothing more than a brief introduction to deductive theory. *Many components of deductive theory that were referred to are technical terms and it is imperative that they be carefully defined. The components of deductive theory, as delineated by Burr (1973) are, sequentially: concepts, constructs, variables, operational definitions, propositions, hypotheses and the principle of ceteris paribus.

Concept

Cox (1979) defined a concept as a term or word that symbolizes some aspect of reality that can be thought about and communicated. Concepts, which are symbols used to describe and categorize the phenomena comprising the world, are inventions of the human mind that provide a means of organizing and understanding observations.

According to Burr (1973), the most crucial aspect of concepts, when they are used as part of a theory, is that they are clear. Clarity implies they are free from obscurity, ambiguity or multiple meanings. Kerlinger (1973) defined a concept as an expression of an abstraction formed by observation and generalization from particular behavior. When new developments are made, as a result of these observations, the concepts do not remain static: Rather, they are in some cases discarded, or are revised or redefined.

Constructs

In their explication on constructs, Kerlinger (1973), Compton and Hall (1972), Mouly (1978) and Burr (1973) purported that a construct is a concept that has been deliberately and consciously invented or adapted for a specific scientific purpose.

Variables

Kerlinger (1973), Burr (1973) and Kidder (1981) corroborated on the notion that those concepts and constructs that vary are referred to as variables. This is because many concepts are not static categories of reality but are instead, phenomena that can vary in some manner. Burr acknowledged that variables are an important part of deductive theory. In fact, one of the major purposes of theory is to explain the circumstances under which variation in some variable influences variation in other variables. It is also important to distinguish between independent and dependent variables. A dependent variable is one whose variation is dependent on the variation in some other variable. It is influenced by the other variables and the one that does the influencing is known as the independent variable. In terms of cause and effect, the variation in the independent variable is the cause and the variation in the dependent variable is the effect.

Operational Definitions

Burr (1973) and Mouly (1978) posited that theories are empirically tested by research with variables that can be operationalized. Science would be impossible if none of the concepts were operationally defined,consequently, the concept must be operationalized in order to be studied. Hence, concepts or variables are operationally defined. An operational definition, according to Kerlinger (1973) ,Compton and Hall (1976) and Cox (1979), assigns meaning to a concept, construct or variable by specifying the activities or "operations" that a researcher will act out so as to measure or manipulate a variable. Operational definitions are in a sense a manual of instructions. In more general terms, Burr (1973) affirmed that operational definitions are clear and specific instructions on what and how to observe and are generally viewed as attempts to *measure* concepts rather than *define* the concept.

There are several notable arguments in favor of operational definitions. Kerlinger (1973) and Kidder (1981)deemed that good research should be written so that another investigator can repeat the research and operational definitions ensure this factor. Kerlinger also believed, secondly, that operationalism facilitates communication among scientists because the meaning of a concept so defined is not easily subject to misinterpretation.

Propositions

Subsequent to the discussion of variables and prior to discussing propositions, is the inclusion of the interconnecting link between these two concepts - that being *relationships* between variables. Burr (1973) reasoned that relationships are systematic patterns of covariation between variables. These relationships exist whenever variation in one variable tends to be accompanied by a systematic variation in another variable.

Theorists, including Burr(1973), reported that one important aspect of relationships is their direction. If a relationship does exist, then when movement from one value to another occurs in the independent variable there will be some type of variation in the dependent variable. If this variation in the dependent variable occurs in the same direction as the independent variable, it is a positive relationship; if it occurs in the opposite direction, it is an inverse or negative relationship.

There are numerous ways to write propositions so that one can effeciently express the existence of a relationship. Zetterberg (1965) formulated a typology of five ways of classifying relationships:

1. *reversible* (if x, then y; if y then x) / *irreversible* (if x, then y; but if y then no conclusion about x)
2. *deterministic* (if x, then always y) / *stochastic* (if x, then probably y), this is common.
3. *sequential* (if x, then later y) / *co-extensive* (if x, then also y) (see also Burr,, 1973; Bennett, 1977).
4. *sufficient* (if x, then y, regardless of anything) / *contingent* (if x, then y, but only if z)
5. *necessary* (if x, and only if y, then z) / *substitute* (if x, then y, but if z, then also y).

Zetterberg's typology provided an efficient quideline for stating the existence of relationships among the variables - in other words, it was useful while writing the propositions in this model.

Whereas concepts and variables are just terms that symbolize some aspect of reality, propositions are declarative statements that assert something about these terms. Burr (1973), Bennett (1977) and Cox (1979) all agreed that propositions are statements regarding the functional relationships between corresponding concepts or variables. Propositions specify interactions among the units of a theory and state particular kinds of relationships rather than reflect what is actually known about the relationship between the concepts used. Zaltman and Wallendorf (1979) depicted propositions as representations of approximate answers to what may or may not be vague, implied research questions.

Bennett (1979) has proposed three types of propositional statements:

1. *categoric* - says little more than that two variables or concepts are related in some way.

2. *sequential* - one concept comes before the other. They are related in a time determined fashion (ie. a time or sequence dimension is inherent in their interaction). There is no cause or effect claim. Burr (1973) and Zettenberg (1965) also examined time sequences in propositions.
3. *determinant* - the two variables are always paired so that for each value of the first variable, we have a corresponding value of the second variable and these associated values are constantly linked.

Of these three types, this model incorporates basically the categoric propositional statement, because as of yet, there is no multivariant approach to studying the relationships among the variables in terms of Zetterberg's classification system.

Both Burr, Hill, Nye, and Reiss (1979) and Kerlinger (1973) indicated that propositions are necessary in order to build theories and that the connection of concepts through propositions is a necessary step toward the generation of explanations and predictions. Practically speaking, they posited that a deductive theory can be considered fairly complete if it contains: 1) concepts, 2) variables and their definitions, and 3) propositions to link the variables. Without propositions, a theory is not complete, for they are the mechanisms of a theory. Without them, the theory would simply be a list of concepts. To reiterate, one may have concepts and good definitions of them but until one has propositional statements about the relationships between the concepts, one does not have a usable theory.

Hypotheses

The process of translating propositions into action is facilitated through the establishment of hypotheses. Cox (1979) defined a hypotheses as the presentation or expression of a theoretical proposition in a testable form. Mouly (1978) portrayed hypotheses as subjective products of the researchers' imaginations designed to provide an anchor around which they can order their thinking. Cox submitted that an hypotheses involves a statement regarding the expected or hypothesized relationship between the variables and Kerlinger (1973) thought they should always be in declarative sentence form and invariably relate variable to variable. Mouly advocated that hypotheses are postulated so as to be able to account for the relationships that are noted in the propositions. Similarily, Burr, Hill, Nye, and Reiss (1979: 18) stated that "an hypotheses is the prediction about a theory in which empirical indicators are employed for the concepts in each proposition" and should be sufficiently concrete so as to be empirically testable.

Ceteris Paribus

Ceteris Paribus, (Burr, 1973:21), is Latin for "other things being equal", and is an indispensible part of theorizing. It would be impossible to take into account all of the circumstances and conditions that influence the relationships studied. Because of this, whenever a proposition is asserted, there is an assumption that all other variables are invariant or held constant.

One of the major goals of science is to gradually acquire knowledge about how variables, that are temporarily ignored, influence the operation of the relationship in a proposition. This type of knowledge is acquired very slowly, and it can be attained only by using the principle of ceteris paribus to ignore the effects of most variables in theorizing and research, and then gradually take them increasingly into account.

This concludes the discussion on the components of deductive theories. Familiarity with these theoretical components was imperative for the successful development of this process model of family consumer behavior.

Theory Expression - Models

The expression of theories is the fourth metatheoretical issue. Both Walters (1974) and Runyon (1977) addressed the issue of theory expression. Basically, they described four ways to express the principles of a deductive theory:

1. verbally
2. quantitatively with mathematical symbols
3. analytically, or
4. through the use of graphic illustration. Walters elaborated on this mode and explained that a dynamic, wholistic model attempts to identify or relate most or all of the variables and focuses on the steps involved in the process being examined.

This research will use both the verbal mode and a graphic mode as a means of expressing the model. The propositions and variable definitions will be stated in writing while a graphic illustration will depict the basic principles of the model. Because the research will use a graphic mode to illustrate and express the principles of this developing model, the features of this mode of expression will be expounded.

Models

According to Cox (1979) and Loudon and Della Bita (1979) a model is a symbolic, pictorial representation that assists theory development in any discipline by clearly delineating the relevant variables and their influence on each other. Such models provide a structure that is helpful for organizing knowledge into a logical pattern that is easier to comprehend and serve as reminders of the relationships between relevant variables. Finally, a model contributes to the construction , application and intrepretation of a theory (Lachman, 1960).

Lachman (1960) and Ward and Robertson (1973) agreed that models may serve three functions in theory development:

1. pictorial representation - models provide visual representation of theoretical and/or empirical phenomena;
2. inferential function - models provide the rules by which theoretical notions are related to each other;
3. interpretational - advanced models may serve to interpret these above mentioned inferential rules, ie. to present them in understandable terms.

It became evident from the literature review that there are several advantages to using graphic models as a means of expressing a theory. First, they force the researcher to consider the contribution of each concept or variable. Second, they readily identify the major variables and further, they pictorially demonstrate the basic relationships between these variables. Finally graphic models lend themselves to simple predictions, for they visually point the way to propositions and hypotheses (Walters, 1974).

Criteria For Evaluating Theories

The fifth and final metatheoretical issue concerns the criteria that should be utilized to evaluate a theory. A review of relevant literature resulted in ten criteria that could be considered when attempting to assess the value of an evolving or established theory or model. These are delineated in the following inventory of evaluative criteria:

1. A theory must incorporate regularities existing in the field of study - ie. it must include what is already known (Mittelstaedt, 1971; Reynolds, 1971;Walters, 1974).

2. It must not contain variables whose effects are not covered by the theory itself (Mittelstaedt, 1971; Reynolds, 1971; Walters; 1974).
3. There must be internal consistency - that is, the theory exists as a meaningful whole (Cox, 1979).
4. A theory must not contain concepts that are specific to a time or location (Mittelstaedt, 1971; Reynolds, 1971; Walters; 1974).
5. A theory must adequately reflect the phenomena it represents, thereby facilitating the functions of explanation, prediction and control (Cox, 1979).
6. A theory must permit deductions that can be tested empirically; it must provide the means for its confirmation or its rejection (Mouly, 1981).
7. The new theory must be compatible with previously validated theories in the field (Mouly, 1981).
8. Theories must be stated in simple terms. This is the *law of parsimony*. The theory must explain the most, in the simpliest way (Mouly, 1981).
9. A theory must not overlook variables just because they are difficult to explain (Mouly, 1981).
10. There must be shared agreement about the relationships among statements. This is called *logical rigor* (Reynolds, 1971; Runyon, 1977).

F. Current Problems in Family Consumer Theory Development

The essence of a literature review is to search the relevant literature with the objective of gaining insight into the compilation of previous research so as to learn what has been done and what remains to be done (Kerlinger, 1973). This enables the researcher to inform the reader of the current status of activities in the area being investigated. The reader is reminded that to this point, four distinct bodies of literature have been reviewed.These are 1) current consumer behavior models, 2) problem solving within a family system, 3) group decision making, and 4) theory development. It is felt that the literature review would not be complete without an assessment of the problems and prospects related to theory development in both consumer behavior and family behavior research. This section can be broken down into three segments - 1) problems inherent in theory development, 2) research methodology problems that can negatively feedback into and affect theory development, and 3) methodological changes designed to advance theory development. It is not within the scope of this thesis to elaborate extensively on each issue, but it is felt that recognition of each topic is necessary so as to enhance the credibility of this research endeavor.

Problems Inherent in Theory Development

Sheth (1981) held that we need more axiomatic modelling of consumer behavior. This research effort is attempting to do just that - ie. build an axiomatic model of the *consumer* decision process within a family. There are however, numerous significant obstacles or problems related to theory building that have to be recognized and addressed. A review of the literature revealed eleven significant problems. The first impediment to be addressed concerns the feasibility of building yet another theory. When considering this problem, Burns and Granbois (1979) suggested that we should ask ourselves several related questions. First, to what degree do the various existing theories actually get used? Second, would further theory building efforts simply contribute to a stockpile of unused theories? Finally, would another theory augment the advancement of knowledge [in the area of family consumer decision making]?

Attempts to answer these questions should influence a researcher's decision of whether or not to proceed with the development of another theory. To date, there is no recognized theory that explains family consumer behavior using the perspective of the family as the buying unit. Wind (1978b) suggested similarities between organizational buying behavior and family buying behavior but he did not develop a theoretical framework. Therefore, if no relevant theory exists, then this effort cannot be criticized for contributing to a pile of unused theories. Instead, it should be recognized for its potential to advance knowledge in the area of family consumer behavior.

Bennett (1977) suggested that if we develop a healthy attitude towards the existing theories, by considering theories as belonging to a discipline rather than a person, we could avoid a proliferation of overlapping theories. Regarding a theory as belonging to a discipline may encourage theorists to develop the existing theories rather than churn out similar, redundant or totally divergent individual approaches (Olsen, 1981).

Secondly, Mittelstaedt (1971), Bennett (1977), Olsen, (1981), and Sheth (1981) all proposed that there is a need for concentration on developing, modifying and improving theories before testing them. They claimed that we need to be able to appreciate the availability of existing theories and recognize the necessity of refining them conceptually rather than concentrating on testing them empirically. Olson cautioned that researchers should not drop consumer theories prematurely and asserted that this in fact could happen should they be premature in their attempts to test a theory empirically. This could result in the failure to develop a potentially useful theory (Feyerabend, 1977).

A third obstacle in building theories is the issue of borrowing concepts in order to develop a theory. Sheth (1981) maintained that researchers have become skilled at borrowing from other disciplines and applying the concepts to consumer related problems. There is, however, controversy over this borrowing practice. Thirteen years ago, Mittelstaedt (1971) argued that any forseeable future attempts to construct any theory of consumer behavior would involve heavy conceptual borrowing from other disciplines. In 1981, ten years later, Sheth conceded that this conceptual borrowing did indeed help the discipline of consumer behavior get off the ground, build faster and mature more quickly. However, recently Olsen (1981), Bennett (1977), Jacoby (1976), and Sheth (1981) concurred that researchers used borrowed concepts at the expense of self generating constructs uniquely suited to the consumer discipline. They now collectively maintain that it is time we began discovering new concepts instead of continually borrowing from other disciplines. Although this would enable consumer theories to advance and develop, conceptual borrowing is an evolving issue and not readily resolved.

A fourth impediment, stemming perhaps from conceptual borrowing, is the low logical rigor of the existing theories. Reynolds (1971) defined logical rigor as the use of logical systems that are shared and accepted by relevant researchers. Burns and Granbois (1979) posited that theory development in the family consumer area is hampered because there is little shared agreement (logical rigor) about the relationships among the statements in a theory. This lack of agreement about propositions hinders the process of continually testing, rejecting and reformulating theoretical propositions (Mittelstaedt, 1971) thereby hampering theory development.

Broderick (1971) and Jacoby (1976) considered a fifth obstacle. They claimed that the conceptual models relevant to family theory development and consumer theory (respectively) are almost always *static* while the phenomena itself is almost always *dynamic*. As recently as 1981, Robertson and Zielinski as well as Gupta, Hagerty and Myers (1983) acknowledged that the fact that more than one person is involved in a family decision renders the pheneomena of family decision making significantly different from the study of individual decision making. There is agreement in the literature that the unit of analysis in family consumer research should be changed from the individual to the family. This shift to an emphasis on the family as a buying unit recognizes the dynamic process in family decision making. Kassarjian (1981) cautioned us to remember, however, that once one turns from individual to group decision making, much of the prevailing knowledge in *individual* consumer psychology does not apply anymore.

Every attempt was made to use group or family oriented variables. Still, this effort is guilty of combining both individual and group variables in the conceptual framework. But it was felt that, initially, the individual variable had to be included in order to provide a sufficiently elaborate framework from which future theorists could develop corresponding family or group related variables. For example, past experience is listed as a personal (individual) variable but could conceivably be conceptualized as family past experience as a decision making unit. Actually, it is not entirely inappropriate to use some individual variables because from the systems perspective, individuals are viewed as a subsystem of the family system (Deacon and Firebaugh, 1981) and thus must be recognized. This inappropriateness of over-using individual variables to study group processes is a sixth obstacle to successful theory development in the area of family consumer behavior and it will have to be dealt with if there is to be fruitful development of family consumer behavior theories.

A seventh stumbling block to the successful development of family consumer behavior theories is the wide use of inductive logic by researchers in their efforts to build theory. Burns and Granbois (1979) asserted that most of the family research and efforts at theory development are not guided by or explicitly related to a deductive theory. Rather, they are seen merely as an interrelation of a large number of variables based on inductive reasoning. In essence, data are often collected without any preconceived notions, in hopes that inherent relationships will emerge to be seen by alert observers. Sheth (1981) recognized this problem when he suggested that we need more axiomatic modeling of consumer behavior. The reader is reminded that the foundation of axiomatic theory is deductive reasoning. The use of deductive logic is recommended because it enables the researcher to start from general assumptions and end up with very specific theoretical propositions. These propositions are the building blocks of a developing theory. Hence, family consumer theories can advance and develop if built upon deductive reasoning. Consequently, a predominantly axiomatic strategy was employed while developing this family consumer behavior model.

Broderick (1971) and Kassarjian (1981), although ten years apart, both asserted that theory development attempts were fragmented and non-cumulative. While it is true that Engel and Blackwell (1982) did, in fact, compile a comprehensive account of the work done in the area of consumer behavior, they did not do so in the family area. This fact, coupled with the practice of some scholars failing to systematically build their work on their predecessors' efforts, evinces the magnitude of the issue of non-cumulative research efforts. This eighth issue of fragmentation is a strong barrier to the development of a family consumer model.

It seemed expedient to offer some background for this issue. In 1971, Mittelstaedt asserted that researchers were still model shopping and seeking the foundations for a grand theory of consumer behavior. Robertson (1974) and Bennett (1977) maintained that this search could be facilitated by developing middle range theories, which are mini theories related to a larger theory. Therefore, consumer scholars developed mini theories about such diverse topics as dissonance, low involvement, attitudes, information processing, etc., often neglecting to build on existing, larger theories and instead relying upon their own individual conceptualizations. There is now a renewed cry for the necessity of building theories that are again cumulative and less fragmented so as to advance the development of consumer behavior theory (Kassarjian, 1981). Ironically, just as the consumer discipline calls for a return to the grand theory approach, family research has finally placed its greatest emphasis on the middle range theory of family decision making (Kassarjian, 1981). This theoritical effort is in a sense an attempt to contribute to the larger body of consumer behavior literature through the development of a mini theory about variation in family member involvement during a consumer decision process and it is hoped that this research in the area of family consumer behavior will contribute to the eventual return to a grand theory of consumer behavior.

Broderick (1971) and Olsen (1981) both agreed that there is a ninth obstacle to successful theory development - that being an overall state of conceptual ambiguity in the existing family and consumer theories. They suggested that it is necessary to further refine and improve the concepts being used if we wish to advance the art of theory development. Related to conceptual ambiguity, is the tenth issue of lack of standardization of the concepts being used. Broderick (1971) and Engel, Kollat and Blackwell (1978) concurred that even though the same concepts are used in most research efforts (see also Burr, Hill, Nyes, and Reiss, 1979) there is lack of standardization of these constructs. This makes it difficult to compare and integrate research findings which in turn hampers theory development and refinement. This issue of standardization was paramount in the researcher's mind throughout the process of defining the variables. Although every effort was made to select a recognized and widely used definition for the most familiar and most frequently utilized variables, for some variables this was not possible.

An eleventh and final obstacle to theory building noted in the literature is construct validation. Bennett (1977) noted that a contribution is made to theory development when a researcher is able to validate concepts by indicating which empirical indicator is the most useful measure of a construct (ie. operationally define the variables). Without this conceptual validation, theory advancement is impeded and often complicated.

In summary, the literature review revealed eleven obstacles or problems that were believed to have the potential of hampering theory development and advancement in the area of family consumer research. These obstacles are:

1. the feasibility of building yet another theory
2. more emphasis on theory development, modification and improvement and less on empirical testing
3. consequences of conceptual borrowing
4. low logical rigor of the existing theories

5. presence of static rather than dynamic theories
6. inappropriateness of individual consumer variables to explain group decision making
7. use of inductive rather than deductive reasoning
8. fragmented and non cumulative research efforts - ie. no replication tradition
9. conceptual ambiguity
10. lack of standardization of concepts, and
11. lack of validation (operationalization) of concepts.

The likelihood that any of these issues will be completely resolved in the near future is low. However, recognition of their existence and impact on theory development and advancement is a step forward in itself and a necessary part of this literature review.

Methodological Problems

Researchers invariably attempt to broaden the domain of a theory by research or replication of research (Bennett, 1977). This section of the literature review will expound the methodological problems that negatively feedback into theory development and advancement thereby potentially hampering the process of building family consumer models.

First, family research has been criticized for the failure of the researchers to develop a theoretical framework for their research (Burns and Granbois, 1979; Broderick, 1971; Burr, Hill, Nye, and Reiss, 1979). In a review of the literature, Burns and Granbois discovered that over half of the more than 600 family studies failed to base their research on a theoretical framework. This deficiency appears to be more prevalent in the family studies area, for Olsen (1981) reported that a look at the consumer behavior literature of the past ten years revealed that nearly every article mentioned some theory or another. This is a great improvement from a 1968 review of the literature by Engel, Kollat and Blackwell which revealed that a very small percentage of consumer research used a comprehensive , integrated model. Among other things, lack of a conceptual framework complicates integration of research findings, the logical rigor of propositions, and generalizability of findings.

Previously mentioned problems of concept validation, standardization, and ambiguity also create potential obstacles to successful theory development. Thirdly, the failure to replicate research findings retards the development of theories. Kollat, Engel and Blackwell (1970) and Jacoby (1976) both believed that a replication tradition would allow researchers to test the validity of previously reported findings and establish a base for future research endeavors. They also contended that failure to replicate research leads to most findings and propositions being based on single studies by a single researcher. This leads to the danger of an increase in misleading conclusions as the body of consumer behavior findings grow.

A fourth methodological problem is representative sampling, or more appropriately, the lack of it. Broderick (1971) explained that the expense of doing representative sampling of meaningful populations is so great that few researchers attempt it. This is supported by Engel, Kollat and Blackwell (1978) and Burns and Granbois (1979) with the latter noting that practically all researchers concerned with family purchase decision making have drawn small, special samples; convenience seemed to dominate the sampling process. The ability to compare findings across studies is severely hampered and the generalizability of findings is greatly limited. Hence, the advancement of theory development is indirectly blocked.

Dunsing and Hafstrom (1975) addressed the issue of data collection as did Burns and Granbois (1979) and Jacoby (1976). These same authors also concerned themselves with a sixth issue - that being the use of subjective observations (resulting from interviewer bias while collecting data). The concern over subjective observations was also addressed by Douglas (1983) who noted that the process of building and refining a theory is complicated by using findings biased by the data collection technique of the interviewer. A seventh methodological problem related to bias concerns the ability of the respondents to accurately recall and report their past behavior. Besides Kollat, Engel and Blackwell (1970), Dunsing and Hafstrom (1975), Jacoby (1976) and Douglas (1983), the research team of Nisbett and Wilson (1977) offered an excellent explanation and critique of the ability of respondents to tell more than they know or can remember. There is a concern with verbal reports of mental processes among theorists striving to build theories using propositions based on such biased empirical findings.

There are many more methodological problems that can indirectly affect theory development[7] including 1) failure to report methodological details (Granbois, 1963), 2) lack of richer dependent and independent variables (Kollat, Engel and Blackwell, 1970; Dunsing and Hafstrom, 1975; Jacoby, 1976; Engel, Kollat and Blackwell, 1978; Burns and Granbois, 1979), and 3) inappropriateness of statistical analysis (Jacoby, 1976).

The final issue to be discussed in this literature review is the use of the decision making concept in theory development and research design. Emphasis is being placed on this methodological matter because a decision process concept is the core of this developing family consumer model and because there has recently been controversy regarding the implementation of the decision making concept in consumer behavior research. Olshowsky and Granbois (1979) challenged the prevailing decision making concept to modeling consumer behavior. They concluded that for many purchases, a decision process never occurs, not even on the first purchase! Such a perspective did not go unchallenged (Usric, 1980; Shimp, 1982; Dickenson, 1982). Sheth (1981) supplemented Olshowsky and Granbois' challenge when he claimed that indeed, the decision making perspective may account for only a relatively small proportion of the total consumer behavior phenomena. Furthermore, adoption of the decision making concept in a research design or as a conceptual framework is fraught with criticism. For example, Granbois (1963), Olshowsky and Granbois (1979), and Dunsing and Hafstrom (1975) criticized researchers for 1) studying only the purchase stage, 2) studying only one stage of the process at a time instead of several or all stages of the decision process, and 3) confining studies to decision processes that resulted in an actual purchase. They felt that studies should also consider abortive decision processes or postponements. They claimed that, 4) most studies base their findings on recent or past purchases rather than current, ongoing purchase decisions. Furthermore, researchers are criticized for 5) placing too much emphasis on the sequential nature of the phases of the process. Most researchers and theorists are accused of assuming that the decision process occured in a sequence and through their research design, they inadvertently impose their assumptions on the respondent thereby biasing the results.

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[7] The reader is directed to Kollat, Engel and Blackwell (1970); Jacoby (1976); Engel, Kollat and Blackwell (1978); and Sheth (1981) for comprehensive dicusssions of the problems and prospects of consumer behavior research. Olson and Cromwell (1975); Dunsing and Hafstrom (1975); and Burns and Granbois (1979) each discuss problems and issues related to family decision making research.

Nonetheless, despite the problems inherent in the incorporation of the decision making concept into consumer behavior models and despite Shimp's (1982) assertion that a challenge to the use of the decision making concept represents a healthy sign of growth for the discipline of consumer behavior, researchers and theorists still use the decision making concept in their efforts to explain consumer decision making. They recognize these criticisms, especially those related to the sequential nature of a rational decision process. However, it is felt that the decision process concept is the most expedient, available concept that affords a means of conceptualizing the process involved in a consumer decision. It provides direction and organization. Provided future efforts are made to overcome or account for these relevant criticisms, there will be less doubt surrounding the appropriateness and utility of the use of the decision making concept to study consumer behavior. This assertion is substantiated by the fact that there is currently an interest in family research on the study of the family *decision making process* (Kassarjian, 1981; Robertson and Zielinski, 1981) with emphasis on the decision making concept.

In summary, the methodological issues and problems that can hinder family consumer theory development include:

1. lack of theoretical frameworks in research endeavors
2. lack of concept validation and standardization and presence of concept ambiguity
3. failure to replicate findings
4. non-representative sampling
5. data collection methods
6. biased, subjective observations by interviewers
7. verbal reports of mental processes - ie. respondents' inability to accurately recall decision processes
8. failure to report methodological details and procedures
9. lack of richer dependent variables
10. inappropriateness of current statistical analysis, and
11. the controversy surrounding the incorporation of a decision process concept into the conceptual frameworks of theories or family consumer research.

Recommended Changes in Research Methods

Undoubtedly, the negative impact on theory development resulting from the methodological research problems previously noted will probably never be resolved completely (Kollat, Engel and Blackwell, 1970). However, recognition of their existence and progress towards their resolution should unquestionably increase the credibility and acceptance of any developing theory or model.

More important, to ensure that this current theoretical effort will increase the efficiency and relevance of family consumer research, it will be shown that efforts were taken to counter or at least recognize the potential drawbacks of research methodology to successful theory development. Consequently, a review of the literature has led to the identification of several suggestions for methodological changes designed to improve family consumer decision making research and theory efforts. The following list is not inclusive but is quite comprehensive and representative of the recognized deficiences in research methods:

1. Both spouses and any relevant children should be used when collecting data (Dunsing and Hafstrom, 1975; Burns and Granbois, 1979; Buss and Schaninger, 1983; Melson, 1980).
2. Design longitudinal studies (instead of cross sectional studies) which incorporate the effects of evolving family conditions (Kollat, Engel and Blackwell, 1970; Dunsing and Hafstrom, 1975; Engel, Kollat and Blackwell, 1978; Buss and Schaninger, 1983).
3. Incorporate representative sampling of a region or nation (Dunsing and Hafstrom, 1975; Buss and Schaninger, 1983).
4. Multivariate statistics should be applied so as to be able to successfully analyze the dynamic aspect of the data (Jacoby, 1976; Buss and Schaninger, 1983).
5. Completely capturing the dynamics and complexity of family decision making could be done more effectively if researchers used a combination of self report by respondents and observation by the researcher over time, plus in depth interviews, use of tape recordings, and increased use of "in situ" techniques (Dunsing and Hafstrom, 1975; Buss and Schaninger, 1983; Douglas, 1983; Melson, 1980).
6. Study decision making processes across decisions rather than only a given decision independently (Douglas, 1983).

7. There should be increased attention to the impact of the environment and situational conditions in which family decision making takes place (Sheth and Raju, 1973; Douglas, 1983).
8. Not all consumer decisions should be considered of equal importance (Melson, 1980).
9. The research should not be restricted to studying only the case of husband/wife conflict. Instead, include a broader range of interactions and more family members (Melson, 1980).
10. View each consumer decision as a process rather than as an isolated act (Melson, 1980).

Conclusion

Burns and Granbois (1979) noted that family *purchase* decision making studies are relatively scarce in the literature. Davis and Rigaux (1974) were among the first to conceptualize the family purchase decision into stages. It is now encouraging to note that family decision making research in general is on the increase (Kassarjian, 1981). This current research endeavor to explain family behavior during the consumer decision process stemmed from the heightened interest in the consumer purchase decisions of families. In conclusion, it is anticipated that this recognition of the obstacles inherent in theory development will augument and facilitate successful attempts to model the family consumer decision process.

G. Summary of Literature Review

A short recapitulation of the literature review chapter is now in order. After reviewing the literature relevant to current consumer behavior models, it was decided to incorporate the decision process component of the EKB (1982) model as a partial base for the core of the decision process in this model. The Kieren, Vaines and Badir (1982) concept of the problem solving loop was chosen as a means of capturing the dynamics of the on going family problem solving process and is also part of the core of the model. In addition, an underlying premise of the entire model is that of a general systems approach in which the family is viewed as a system functioning within a system. A brief section described the difference between ad hoc group, organizational decision making and family decision making.

An examination of the literature relevant to theory development revealed five metatheoretical issues that theorists will encounter and have to acknowledge when developing a theory or model. The key insights gleened from this review, aside from an understanding of the nature and components of a theory, was the appropriateness of the adoption of an axiomatic approach to building this model, although part of the developmental process included borrowing some concepts, a limited use of a factor approach and some utilization of codification while developing the propositions. However, the major strategy was deductive reasoning. The model is expressed verbally and through the use of graphic illustrations. Also, the criteria that could be used to evaluate a theory was the starting point for the development of a response sheet to aid in the validation of the developing model on family consumer decision making processes. The literature review culminated in a deliberation of the potential obstacles to be surmounted or at least recognized while developing a theory or model.

IV. Methodology

A. Development of Conceptual Framework

Introduction

The essence of this research effort was to develop a model to explain family behavior during a consumer decision with special emphasis on variation in family member involvement during the different stages of the consumer decision process. In order to do this it was necessary to build and develop a theoretical structure or a conceptual framework which would a) provide order and direction to the research, b) provide a structure enabling one to outline and schematically express the relationships between the variables, and c) provide guidelines for developing, in the future, the applied research that will eventually occur (Kerlinger, 1973; Mouly, 1978; Compton and Hall, 1973; Heck and Douthitt, 1982). This chapter elaborates the sequence and justification of the developmental process involved in order to arrive at a functional conceptual framework.

Organizational Tactics

Pertinent to the development of this model were several organizational tactics that were in effect from the beginning:

1. each reference from the literature was noted on a 4 x 6 index card and filed alphabetically, for quick, easy access.
2. each definition for each variable was typed onto a 3 x 5 index card. The variables for each of the three components of the model were noted on different colored cards (ie. external variables on yellow cards; internal variables on pink cards etc.).
3. as the propositions were individually pulled from the literature, they were filed according to type.
4. as each of these propositions was noted, it was also fully documented with author, date and page number.

These organizational tactics proved to be very expedient and extremely useful in keeping track of the diverse, abundant information gathered over an extended period of time.

Explanation of the Developmental Process

The final conceptual framework of the model is the result of several revisions, for it was found that the original conceptualization of the family consumer decision process was sketchy (Figure IV.1). It was first envisioned that the major concepts in the model were 1) external environment; 2) internal environment, with 3) the family decision process as the *core* of the model. It was assumed that the family is a system acting a within a system, which accounts for the nested cup scheme used to illustrate the model. Only three sets of propositions were initally envisioned.

Using the model in this state, the researcher went to the marketing, consumer research and family studies literature to find documented propositions so as to account for the relationships among the noted variables. It soon became evident that the conceptual framework was inadequate in the initial conceptualization of only three sets of propositions and only five sets of internal family variables. Consequently, the model was revised to accomodate these inadequacies by expanding the sets of propositions to six and adding to the list of internal variables.

Armed with this revised framework, the researcher again went to the literature in search of more propositions and again the framework was found to be incapable of accounting for all of the documented relationships between the variables. Hence, the framework was revised for a second time. There were several additions to the list of internal influence variables. Furthermore, a decision was made to differentiate seven stages in the decision process - problem recognition, goal reformulation, search, alternative evaluation, selection/intention, purchase, and post purchase evaluation.

With this revised conceptual framework, the researcher again returned to the literature and this time began the task of defining the concepts and variables as well as finding still more propositions. It was discovered that the framework was still conceptually incapable of visually illustrating the core concept of family member involvement at each stage of the decision process. To account for this, the *core* was halved, with the left hemisphere depicting the seven stages in the consumer decision process while the right side dealt with concept of family member involvement (Figure IV.2). There were nine sets of propositions and a third revision of the model.

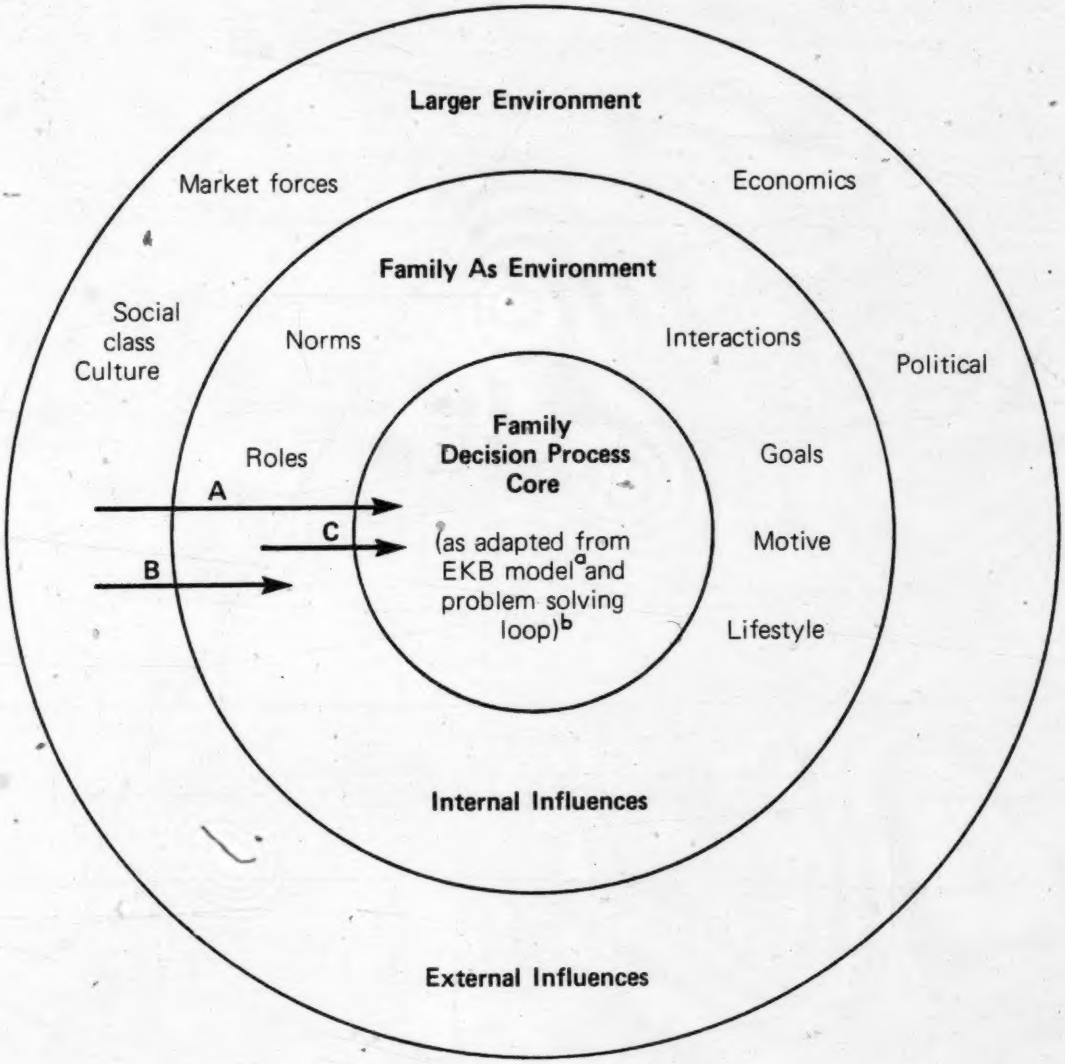

Figure IV. 1

Original Version of a Process Model of Family Consumer Decisions

[a] **Engel and Blackwell, 1982: 500.**

[b] **Kieren, Vaines and Badir, 1982: 143.**

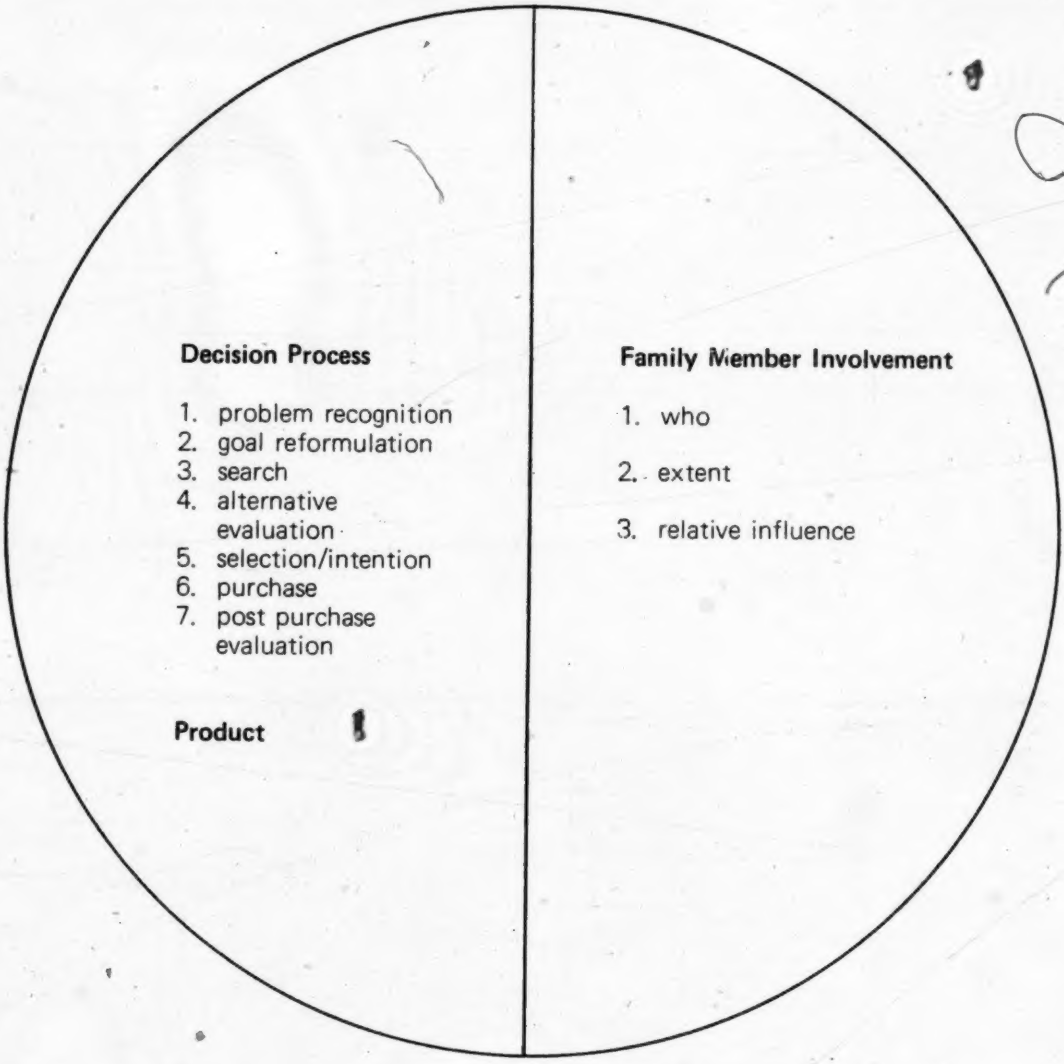

Figure IV.2

Core of the Original Version of a Process Model of Family Consumer Decisions

At this point, over 400 propositions had been gleened from the literature. The next step was to condense, edit, refine and continue to order the propositions, both by type and by stage in the consumer decision process (where applicable). The result would be fewer, clearer propositions with the variables clearly delineated.

This editing effort resulted in the nine sets of propositions being reorganized, expanded, relabeled and ordered according to "E" for external, "F" for family (internal) and "P" for process/product. The resultant ten sets of propositions were noted on page 32.

The final change was another expansion of the right hemisphere of the core of the model. It became evident that the term "family member involvement" was inadequate and confusing. Therefore, it was expanded and adapted to include the variables of who participates, interaction, and patterns of decision making. These variables were to be applied to every stage of the consumer decision process for each separate purchase decision undertaken and considered by the family. This conceptualization enabled the researcher to more efficiently and specifically order and categorize the many propositions taken from the literature concerning family member involvement during a consumer decision.

The result of this developmental process is the model in Figures IV.3, IV.4 and IV.5, which were sent to an expert panel to be reviewed. They also received the definitions of the variables depicted on that version of the model plus the propositions accumulated at that time. With regards to the propositions, the expert panel basically reviewed the same propositions as are in Chapter II. The author was still in the process of ordering, editing and condensing them when the expert panel received them for review.

B. Selection of Expert Review Panel

A panel of experts was selected for the purpose of evaluating and reviewing the model. An effort was made to select reviewers in the fields of home economics, consumer behavior and problem solving theory. The final panel consisted of four members. Two of the members had a family studies background (management, ecosystems and problem solving) and the other two members had a consumer behavior perspective (marketing and consumer studies). Their responses would provide an overall evaluation of the model, while at the same time, reflect the differences in their individual

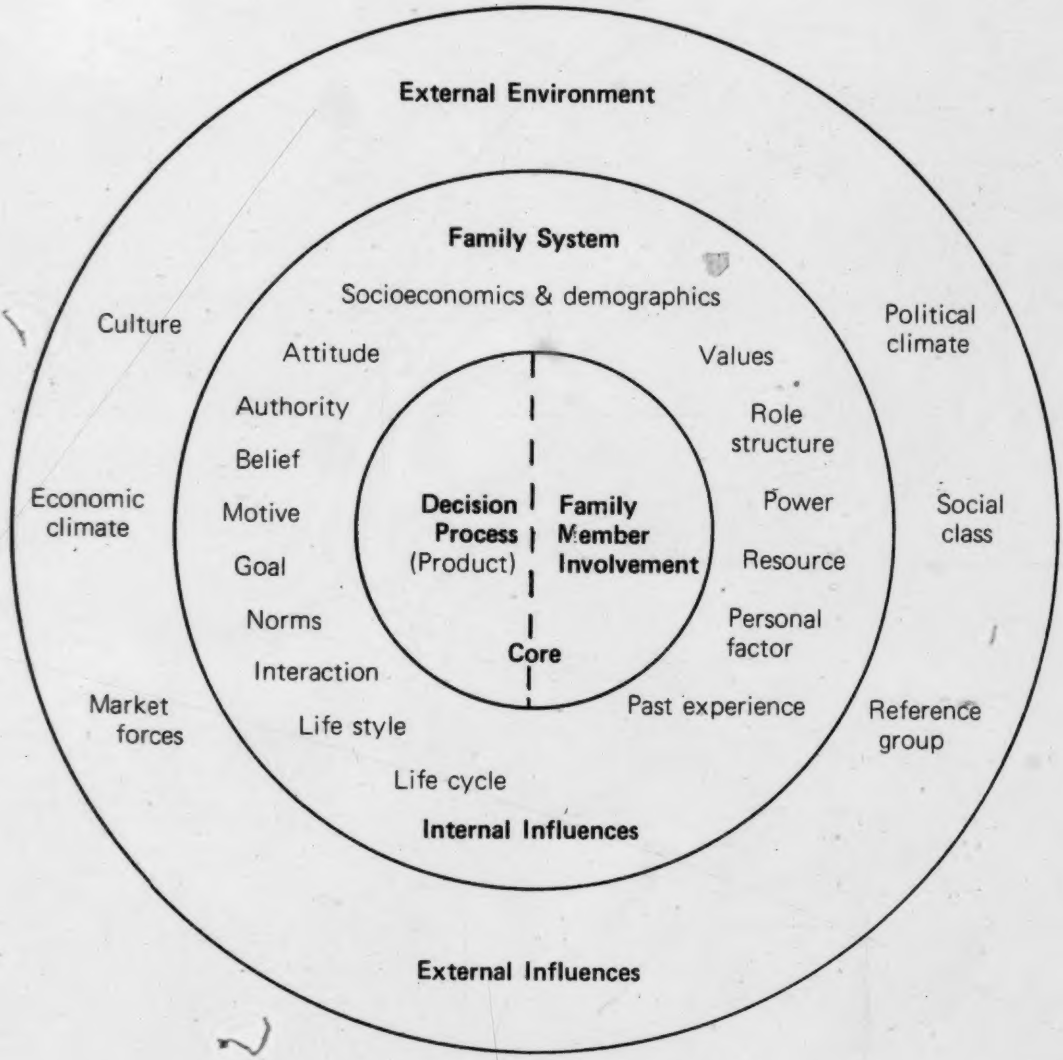

Figure IV.3

Revised Process Model of Family Consumer Decisions as Sent to the Expert Panel

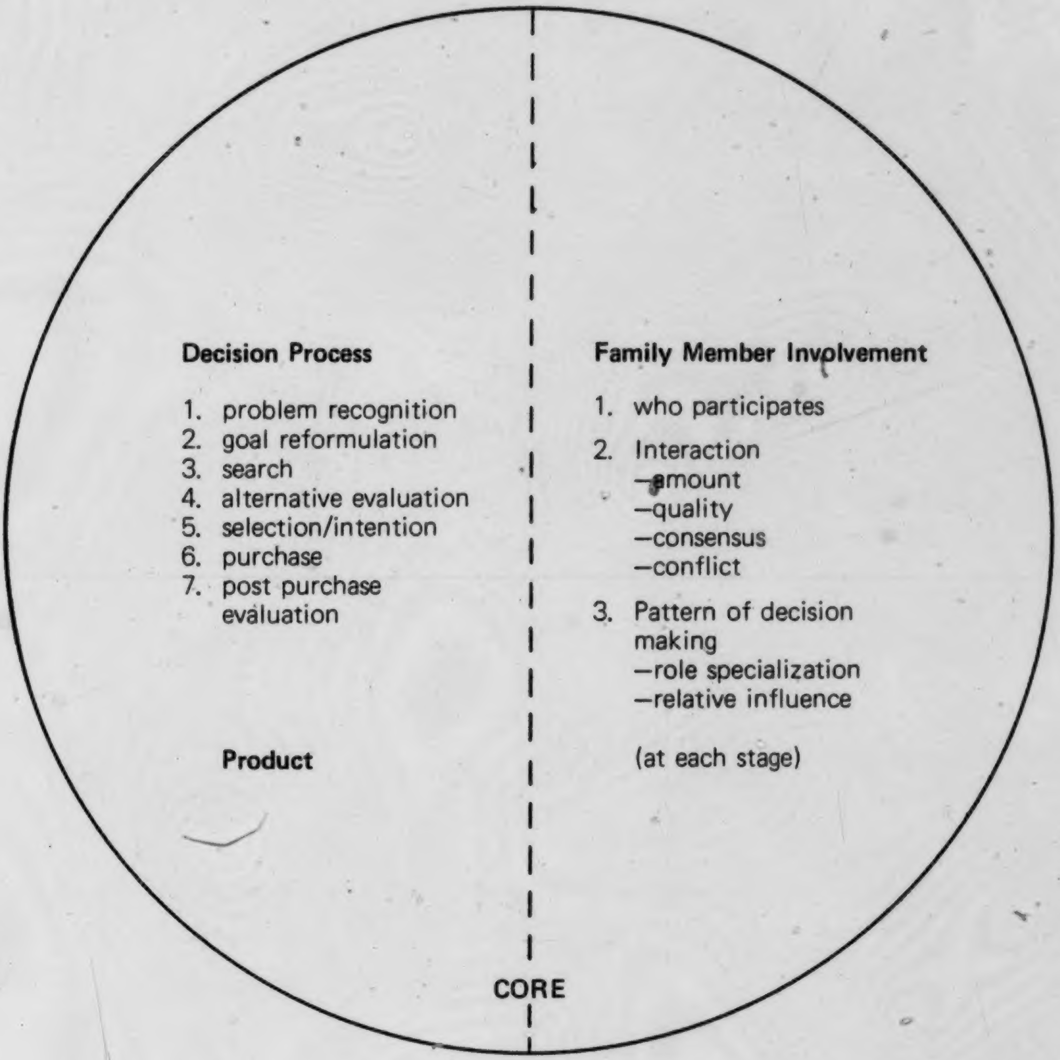

Figure IV.4

Revised Core of the Process Model of Family Consumer Decisions as sent to the Expert Panel

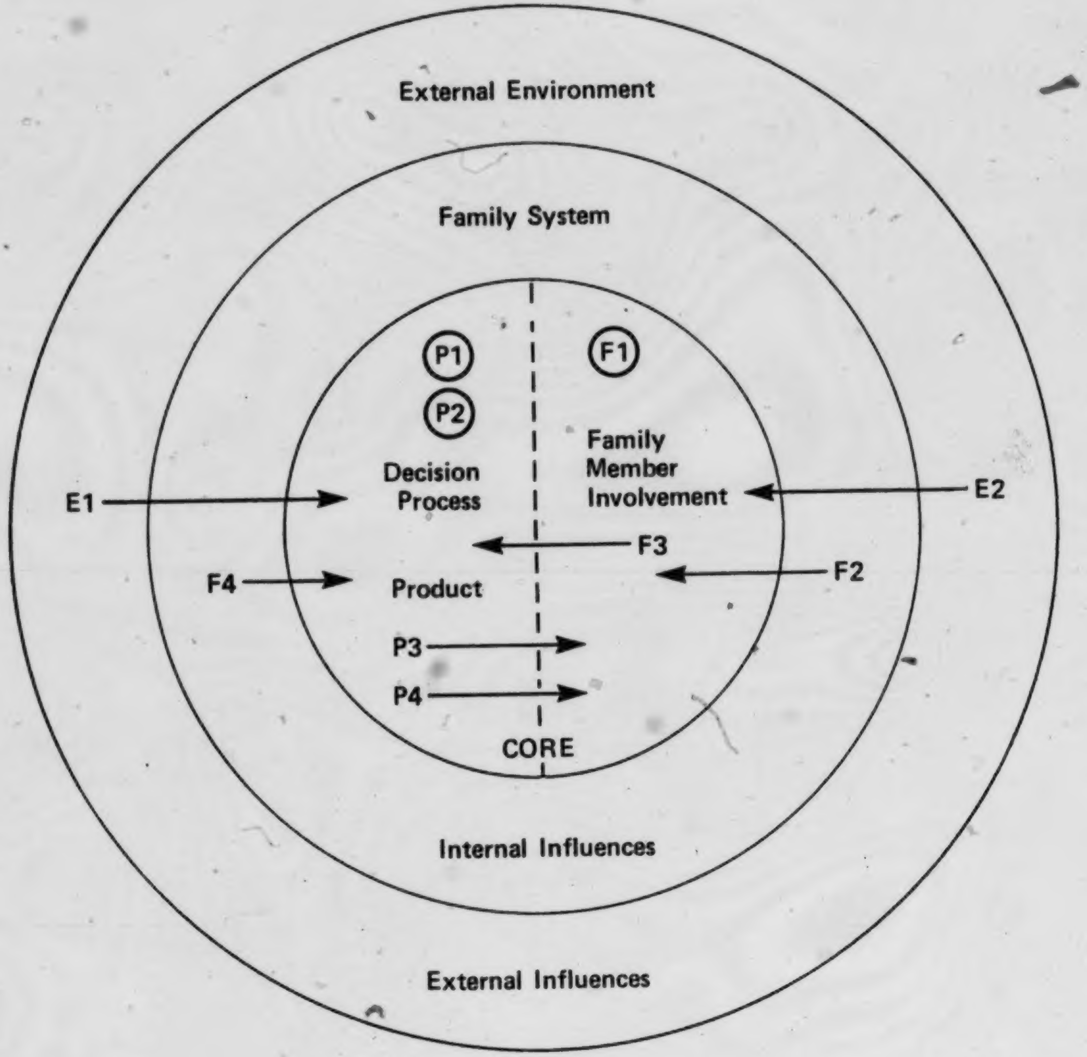

Figure IV.5

Revised Process Model of Family Consumer Decisions Depicting the Sets of Propositions as Sent to the Expert Panel backgrounds. This diversity would contribute to the refinement and evaluation of the model.

The panel members were contacted by telephone prior to being mailed a copy of the model (as seen in Figures IV.3, IV.4 and IV.5), a literature review, a response sheet (Appendix A), and a cover letter explaining the nature and purpose of their task. In essence, the panel members were asked to view the model and indicate any ommissions, suggested improvements, etc., via both the response sheet and additional comments throughout the body of the text.

The review of the model by such a diversified panel would contribute to the decision of whether this was a viable theoretical effort capable of contributing to a better understanding of family consumer behavior.

C. Development of Response Sheet

An instrument was required to obtain the responses from the panel members and to obtain feedback necessary to evaluate and refine the model in the future. This section will briefly outline the development of this instrument.

The starting point for the development of the questions was the inventory of criteria (outlined on page 102) that could be considered when attempting to assess the value of an evolving or established theory or model. Several questions were also derived from the critique of the existing consumer behavior models. After several drafts, the result was a response sheet (Appendix A) comprised of fourteen questions related to organization, internal consistency, clarity of variable definitions, documentation of propositions, compatibility with previously developed models, adequate reflection of family consumer phenomenon, simplicity, domain, means of rejection/confirmation, usefulness as a conceptual framework, strengths and weaknesses and, finally, potential to overcome the noted inadequacies of existing consumer behavior models.

D. Organization of Panel Responses

The response sheets and the body of the text were returned via mail by the panel members. First, the responses in the margins of the text were condensed and summarized and eventually either incorporated into the model or included as recommendations for future revisions. The next procedure was to organize the responses of all four panel members by question (ie. group together all responses for question one, two, etc.) until all fourteen questions were so organized. The author was then prepared to analyze the panel's evaluation of the model. A summary of the panel responses are outlined in the following chapter.

V. Panel Responses and Discussion

This chapter will be a discussion of the responses to each of the fourteen questions on the response sheet (Appendix A). As each separate qestion is considered, the comments are first condensed, thereby providing an overall reaction to the question, followed by a discussion of any individual suggestions or criticisms that expanded upon the general reaction. Finally, there will be a specific indication of whether the comment, criticism or suggestion was incorporated into the model or if it has been included in the recommendations for future revisions outlined in the final chapter. Through this effort, the reader will have a better idea of how the current conceptualization of the model actually evolved from its original state to Figures II.1, II.2, and II.3. Furthermore, this ensuing discussion will clarify the rationale for the current state of the model and also provide some direction necessary for future revisions and refinement. The fourteen questions will be individually examined and each one will be restated in italics prior to a discussion of the panels responses to that question.

Question one:

Does this model include what is already known in the field of consumer behavior and family decision making?

There was an overall consensus that the model included the main body of knowledge in consumer behavior and was an accurate picture of the major aspects of current thinking in the fields of consumer behavior and family decision making.

There were several suggestions for improvements. First, it was felt that the consumer decision making process within the inner core did not contain the idea of stimuli and information processing that leads up to problem recognition. The panel reviewer explained that in a family decision making situation, some elements of individual information processing still must be present and are likely confounded by interaction effects among family members. As a result of this criticism, the variable *information processing* was included under search (in the decision process) and the term *perception* was added to the personal factors (internal variable).

Another suggestion was the incorporation of aspects of family management (for example, decision rules, central and satellite decisions plus social, economic and technical decisions) into the decision process (core). This author feels that since an economic decision is based on efforts to maximize utility from resource use while achieving identified goals and preferences (Deacon and Firebaugh, 1981), this family *consumer* decision is in effect, an economic decision. It is recommended, however, that these noted types of decisions from the family management literature be considered as potential inclusions in any future revisions of the model.

A third suggestion was the inclusion of the social and psychological area of internal family relations during family problem solving into the internal environment. It was argued, by the reviewer, that this would provide another focus for the internal family system environment. The author felt that this suggestion applied to the internal environment component of the model, which was therefore revised by changing the term *interaction* to *patterns of interaction*. Consequently, the redundant usage of the term interaction in both the internal environment and the family member involvement side of the core was alleviated by this revision. The variables that were once part of the term interaction in the family system (ie. flexibility, adapability, etc.) are now noted under resources, as *interaction resources*. The definition of the core variable, *interaction*, remained unchanged.

Question two:

Does the model adequately reflect the phenomenon of family consumer decision making? Are there a sufficient number of variables and propositions to enable this model to describe and account for the influences on family member involvement during a consumer decision? If not, what additional variables would you suggest be incorporated?

Each of the three components of this question will be addressed in turn. There was not total consensus among the reviewers regarding the adequacy of the model to reflect the phenomenon of family consumer decision making. Two panel members agreed that yes, the model did succeed in depicting the phenomenon of family consumer decision making. Of those two, one continued by declaring that the interaction of a family systems approach along with problem solving within the family system, and the EKB (1982) model of decision making provided a realistic, non-fragmented approach that allowed for different components of the model to be considered separately and systematically. A third reviewer, however, wondered if this model was intended to be a family consumer decision making model *or* a mini theory using external and family variables to explain family member involvement during the decision for a consumer product or service. The author clarified this point by noting that this theoretical effort is an attempt to contribute to the larger body of consumer behavior literature through the development of a mini theory about the family consumer decision process with special attention on variation in family member involvement throughout the stages of the consumer decision.

The reviewers also did not agree on the issue of whether there are a sufficient number of variables or propositions in the model. The majority felt that there was a sufficient number of variables and that the model allowed for and encouraged additional propositions to be identified and concepts isolated. In contrast, one panel member felt that the number of variables and propositions needed to be narrowed or at least synthesized more. Consequently, an attempt was again made to condense the propositions and although more variables were added, the variables were also refined and synthesized. This resulted in a revision of Tables II.1 and II.2. The suggestion of the same reviewer that the model focus only on family member involvement has not been heeded at this time.

There was also criticism regarding the limitation of including predominantly husband/wife dyad related propositions. The suggestion to incorporate the variable of family structure as an internal variable so as to overcome the husband/wife dyad limitation and to allow recognition of different types of families is a recommendation for future refinement.

Another critique was that additional discussion was needed regarding the issue of the absence of the multivariate or interactive effects when stating the propositions. Consequently, this discussion was added to supplement the introduction to the statement of the propositions (page 34).

The request for additional variables brought interesting responses, some of which will be incorporated into the model and others that will be recommended for future revisions. As a result of the panel's recommendations, the variables *time and needs* were added to the internal environment (family system) of the model. *Time* was incorporated so it could be considered in relation to the dynamics of the decision rules, decision styles, and product acceptance as well as being considered as a resource to be allocated in the decision making process. Time pressure is still included as a limited resource. Refinement of the concept of time and the propositions related to it is a recommendation. Similarly, *needs*, which are fundamental to motives, values and goals, was made an explicit internal variable. A suggestion was made to isolate standards as an internal variable, but it was left as a subconcept of evaluative criteria, for it is viewed as an inherent subconcept of alternative evaluation. Likewise, *information accessibility* remained a part of *market forces* although a panel member suggested it be isolated as an internal variable. It was suggested that the external environment be expanded to include natural, physical and technical environments. It is recognized that inclusion of these variables would make the model more meaningful from the systems perspective and therefore, their inclusion is recommended for future revisions and refinement.

There was also an interesting approach suggested regarding the inclusion of several additional concepts within the decision process half of the core of the model. Basically, the family management concepts of central-satellite decisions, decision rules and social, economic and technical decisions were seen by one reviewer as appropriate for inclusion in the expansion of the decision process. The reaction to this suggestion is that in essence, the family management approach to categorizing types of decisions is really another conceivable, appropriate conceptual framework around which family decision making could be designed. However, this current model uses a combination of the EKB (1982) and the Kieren, Vaines and Badir (1982) models as its conceptual framework. Therefore, at this point, it is felt that consideration of these family management concepts, albeit applicable, need not be incorprated into the model at this time. It would be an interesting issue to ponder for future revisions. Finally, some panel members felt that the internal variable of *personality* be expanded to include the concepts of field dependence/independence and consumption roles. This could be considered in future refinements as could the suggested expansion of *perception*.

Question three:

Is this model compatible with (ie. does not contradict) previously developed theories/models in the area of family behavior during a consumer purchase decision?

Mouly (1981) indicated that the criteria of compatability with existing theories or models was an important factor to consider when assessing the value of a new theoretical effort. The panel's response to this question was an overall consensus that this model did not contradict any previously developed theories or models in the area of family behavior during a consumer purchase decision. In fact, it was appraised as having successfully added some new family variables and also as expanding upon previously developed theories.

Question four:

Are the propositions organized logically? Does this model exist as a meaningful whole? Are there any gaps in the logical sequence of the model?

This question is concerned with the internal consistency of the model. The panel agreed that the internal consistency was acceptable and reasonable and that the model represented the interaction among the components. However, there was concern that the figures needed more explicit labelling if they were to be understood without the extensive written component. Hence, the current version that depicts the sets of propositions has more explicit proposition labels (Figure II.3). Further work is still required to better depict the family member involvement portion of the core of the model.

Another suggestion was that while the major direction of interest - and the direction of propositional statements - is the solid arrows, it should be recognized that a reciprocal effect likely exists. In fact, this reciprocal effect was recognized as is evidenced by the inclusion of more than one set of arrows, especially within the core (Figure II.3).

Finally, a reviewer noted that although it may be impossible, it would be useful to have a flow chart or diagram depicting the synthesis involved so as to aid the user in seeing the links between the variables. This criticism may have been unfounded because the model included a summary matrix (Table II.2) that pulled the propositions together, thereby adding to the internal consistency of the model. This criticism did raise the issue that perhaps further clarification was necessary regarding the purpose and suggested usage of Table II.2 and subsequently, this was included as part of the statement of the propositions (page 36).

Question five:

Does this model represent in a simple way, the variables that exist and the relationships among them?

Mouly (1981) stressed the importance of the law of parsimony. That is, a model must explain the most, in the simpliest way. There were mixed reactions regarding the simplicity of the representation of the variables that exist and the relationships among them. There was agreement that the pictorial representation of a nested cup scheme was visually very straight forward, with the exception of one panel member. This member felt that the relationships were not always explicitly seen within the core of the model. Therefore, the suggestion to include more about the variables of participation, interaction and patterns of decision making was considered. Figure II.2 depicts the results of the subsequent revision. It was felt that a further suggestion regarding the necessity of doing more work on diagraming the sets of propositions in the central core, so as to clarify the relationships at each stage, be recommended for future revisions.

The author recognizes one panel member's argument that a box diagram might provide the skeleton overview a reader needs in order to see the specific variables and their relationships. However, it was decided that in order to remain consistent with the nested cup scheme as a means of conceptualizing systems concepts (Bronfenbrenner, 1979; Hill, 1984), the box diagram would not be incorporated into the model. Finally, the panel members indicated that the logical organization of the diverse propositions into a framework of ten sets helped considerably in the comprehension and interpretation of the findings. Furthermore, the summary matrix (Table II.2), provided a meaningful way of presenting the propositions so they could be viewed simultaneously.

Question six:

Please comment on the adequacy of the documentation provided to support the propositions?

The mechanisms of axiomatic theories are the propositions. Burr, Hill, Nye and Reiss (1979) and Kerlinger (1973) both indicated that propositions are necessary in order to build theories and also that the connections of variables through propositions is a necessary step towards the completion of the theory or model. Hence, it is important that they be well documented. There was a general opinion that the propositions seemed to be well documented and supported by the literature. The panel expressed concern that a small number of propositions were not cited and their suggestion to include some disucssion regarding the rationale for undocumented propositions was incorporated into the introduction to the section on propositions (page 35).

Question seven:

Does this model contain variables whose effects are not well described in the model itself?

Mittelstaedt (1971), Reynolds (1971) and Walters (1974) were concerned with the issue of not having variables included in a theory unless the effects of those variables are covered by the theory. In other words, there must be a proposition that states a relationship between that variable and another and there must be a definition for that variable (Mouly, 1981). Except for one panel member, the reviewers agreed that all variables were satisfactorily explained by the model. The one exception was the issue of whether *consensus* (ie. shared family reality) is in fact necessary for effective family interaction or decision making. Documented propositions suggesting that effective problem solving may be affected by *consensus and conflict* are included in the model. These need to be empirically tested in the future so as to clarify the issue of the necessity of family consensus in order that effective decision making or interaction can take place.

Question eight:

Please comment on the clarity or ambiguity of the variable definitions.

Compton and Hall (1972) agreed that variable definitions should be stated in such a way as to give the reader a concise, clear, unambiguous understanding of the concept.

The review panel were unanimous in their evaluations that the definitions were very clear but most thought they were needed earlier in the text so as to clarify the meaning of the propositions. Therefore this suggestion was heeded and the definitions now proceed the propositions.

One panel member pointed out the reality that different researchers may define and operationalize the variables differently. To counter this potential hinderance to theory testing, the variables were currently defined in general terms with a strong recommendation that future researchers attempt to operationally define the variables as part of the model.

Question nine:

In your opinion, are the scope and domain of the model too narrow or too wide?

There were varied reactions to this question. To summarize, the model explains *family* behavior and especially variation in family member involvement during the *seven stages* of a *consumer, high involvement* decision. One reviewer maintained that the domain of the model was very wide and explained that the sheer number of combinations of variables which can occur in a family decision process probably accounts for the width of any theory or model designed to explain that phenonemon. Two panel members, however, claimed that the domain of the model was perhaps too wide, one because of the enormity of the task of reviewing the model and secondly, because she questioned whether there can ever be an all encompassing theory of consumer behavior. These same reviewers suggested that perhaps the domain could be narrowed to focus on only the family member involvement at various stages instead of including all ten sets of propositions and further suggested that all we can do is test parts of the model. Both of these approaches are included as recommendations for future revisions. In other words, further work is needed on the component of family system on family member involvement.

The other panel member stated that the domain of the model was quite appropriate because it a) dealt with the family as a unit, b) acknowledged expansion of the model to include many types of families and, c) attempted to provide a means of systematically studying an important consuming unit that may vary in its decision process but within specified stages and within a range of involvement.

Question ten:

Does the model provide the means for future empirical testing thereby allowing for its confirmation or rejection (acknowledging that concepts have not yet been given operational defintions)?

The panel members agreed that there is ample opportunity for empirical testing *in the future* provided that the model is first refined and the variables are operationally defined (recognizing the enormity and complexity of that task). It was also recognized that when the model is empirically tested, only parts of the model can be tested and only on a cross-sectional basis, ie. one or a few of the stages at a time. This approach would ensure future evaluation, confirmation and rejection of this model, thus all three suggestions (that is, refinement, operationalization and testing portions of the model) are recommended for the future.

Question eleven:

Would you be able to use this model as a conceptual framework for research?

The panel replied to this question with a qualified *yes.* One reviewer stated that parts of it could be used if the distinction between problem solving and decision making were cleaned up. Thus, an attempt was made to clarify those concepts within the text of the thesis. Another panel member again suggested that variables needed to be operationally defined. Also, it was recognized that a challenge lies in choosing the statistical analysis that would be needed to combine variables in a meaningful way so as to predict or explain family consumer behavior. Each of these qualifications need to be addressed in future refinements of the model.

Question twelve:

Please comment on the strengths and weaknesses of the model?

In order to evaluate and refine the model it was necessary to obtain feedback regarding the model's perceived strengths and weaknesses. The strengths will be considered first. The panel agreed that an indepth review of the literature resulted in drawing together a vast body of literature. A second strength was the resulting composition of a systematic model to illustrate the family consumer decision process.

Thirdly, the focus on family variables strengthened the conceptual framework of the model. Finally, the comprehensiveness and non-static character of the model provides direction for theory development in the future as families change and make different consumer decisions.

One panel member suggested that it is very difficult to determine the strengths and weaknesses of a model until it is tested, for what looks fine on paper may prove very difficult to deal with once empirical testing starts. Several weaknesses were outlined that need to be recognized. As noted earlier in discussion of question eleven, there was confusion or lack of clarification between the concepts of decision making and problem solving. Hopefully, this has been alleviated. Secondly, failure to depict interrelationships more explicitly within the core of the model is a task to be undertaken by future researchers. Third, it was suggested that it is necessary to show how problem recognition occurs as a result of stimuli and information processing within the internal environment (family system). In response to this criticism, it is necessary to recognize that although information processing has not been explicitly depicted on the model, the inclusion of information processing is implied and also inferential from the definition of *market forces* and individual *perception*. Thus, it was already incorporated into the model. Even so, further work is necessary to clarify this component.

The further suggestions to reorganize the labelling of parts of the model and acknowledge the fact that the arrows could be recognized as potentially two-way, were partially incorporated into the model (Figure II.3). A final weakness recognized by a panel member was the danger that the internal environment (family system) could be become a barrier rather than a filter between the core and the external environment. It was suggested by that panel member that this could potentially be overcome by expanding the concept of environment to include levels of environment (Bronfenbrenner, 1979; Hill, 1984) and types of environments (Paolucci, Hall and Axinn, 1977). This suggestion is recommended for future revisions, for it could provide expanded perspectives for understanding the family decision making process as well as provide a framework upon which to organize research questions related to ecological systems.

Question thirteen:

Criticisms of the earlier consumer decision models cited in the literature review included the following:

1. *emphasis on brands rather than products*
2. *focus on repeat purchase rather than high involvement*
3. *lack of emphasis on process stages*
4. *concepts borrowed from other disciplines without evidence of applicability*
5. *use of individual variables to explain group decision making*

In your opinion, does this model overcome these inadequacies?

The author believed that not only was it imperative to present arguments explaining why the existing consumer behavior models were not adequate or appropriate for this theoretical effort, it was also necessary to clarify whether or not this current model succeeded in overcoming those criticisms noted in question thirteen. Basically, there were five criticisms and without exception, the panel concurred that the first three issues were resolved. The panel was concerned however, with the conceptual borrowing and the use of individual variables to explain group decision making. In essence, the panel members suggested the necessity for a discussion of and a rationale for the inclusion of the individual consumer behavior propositions to explain family decision making. This has been incorporated into the discussion on page 106.

Another reviewer pointed out the need for a review section on the differences between group and individual decision making. Also, there was a concern that no recognition was given to the fact that the family as a decision making unit is different from an ad hoc group or organizational buying. This critique was addressed by expanding the literature review to include a brief discussion of the relevance of both family sociology literature and organizational buying literature on group decision making.

Question fourteen:

General comments:

There were several constructive criticisms given in response to this item that need to be acknowledged. First, one reviewer disagreed that a model necessarily is a picture and her subsequent request that a clearer relationship between the terms model and theory be provided was fulfilled. Within the text, when reference is made to this theoretical effort, the term *model* is used. On the other hand, when reference is made to the overall task of developing a theory, the term *theory* is used. This distinction stemmed from the rationale that this research was an attempt to model family consumer behavior with the anticipation that, in the future, a theory of family consumer behavior will evolve as a result of this conceptualization.

Another suggestion was that there is a parallel between family management and family decision making to the point that they are synonmous. This panel member suggested that it is conceivable to apply family management concepts to consumer decisions. This is a very relevant observation which merits consideration during future refinements of the model, although some aspects of family management are already incorporated.

Two reviewers maintained that a reading of the material did not leave them with a concise description of what the theory was and what it predicted or explained. This confusion stemmed partly from the undifferentiated use of the terms theory and model (now remedied) and also from the failure of the author to explicilty state the delimitations or domain of the model earlier in the text (now in abbreviated form in the justification and elaborated in Chapter II). In essence, the confusion has been cleared up by restating the purpose. As a result of further panel suggestions, the wording of the objectives was polished and clarified, as was the overall body of the text.

The general consensus of the panel was that this research was an ambitious undertaking in an area of research that needed development. The panel agreed that this theoretical effort brought a sense of order to a gigantic body of literature and that future endeavors could only benefit from this conceptualization of the family consumer decision process.

VI. Summary and Recommendations

A. Summary of Procedure

The objective of this research was to model the process that a family as a group goes through, while making a consumer decision. Both the intricacies of the variation in interaction that occurs between family members at different stages of the consumer decision and the effect of the immediate environment on this interaction were given special attention.

The first step in the development of the model was an extensive review of the literature relevant to theory development and problems inherent in theory development coupled with a review of the consumer behavior models, family problem solving within a system and group decision making. The propositions and definitions of the variables were obtained from the marketing, family studies and consumer research literature. A concurrent task was the development of a conceptual framework that could be used to depict the variables and the relationships between them.

An intermediate step was the establishment of an expert review panel and the development of a response sheet (Appendix A) for the purpose of reviewing and evaluating the model. Finally, panel responses were discussed and the panel's recommendations were either incorporated into the current version of the model (Figures II.1, II.2 and II.3 and Tables II.1 and II.2 in Chapter II) or are included in this chapter as recommendations for future revisions and refinements of the model.

B. Summary of the Model

Chapter II contains an extensive description of the most current version of a model designed to explain family behavior during the stages of a consumer decision. This section will contain a summary of the highlights of the key aspects of the model.

In short, the domain of the model is restricted to the study of the *family* as a buying unit as its members go through the *seven stages of a high involvement, consumer* decision. The model is comprised of three major components and is pictorially represented in a nested cup scheme so as to illustrate the systems approach to conceptualizing the study of the family. The outer circle represents the external environment and is comprised of several sets of variables including culture, economic system, political system, market forces, social class and reference groups. Within this model, the external environment is viewed as affecting the decision process and family member involvement, with recognition that this latter influence is filtered through the internal environment variables (family system).

The second circle depicts the family as a system and contains numerous sets of variables including values, goals, needs, time, norms, family life cycle, family life style, patterns of interactions, attitude, beliefs, authority, power, past experience, role structure, resources, personal factors and socioeconomic - demographic variables. Several of these internal variables, which include subconcepts as well, are viewed as individually or collectively having direct influence on the core of the model.

The inner core of the model is divided, with the left side depicting the seven stages of the decision process while the right side illustrates family member involvement at each stage. The stages of the decision process are a combination of the decision process component of the EKB (1982) model and the concept of the problem solving loop from the Kieren, Vaines and Badir (1982) model. The concept of family member involvement includes participation, interaction and patterns of decision making. The core of the model is affected by the external and internal environments, as well as by other components (variables) within the core.

Definitions of the variables (approximately 120) are grouped according to the three components of the model. Propositions (approximately 250) were ordered into ten sets which, in turn, were organized according to external, family and process/product categories. A summary matrix supplements the extensive listing of propositions and provides a means of viewing all of the propositions simultaneously.

C. Recommendations

It is recognized that the process of building a theory is a continuous process and never complete (Calder, Phillips and Tybout, 1983) but is also suggested that this theoretical effort produced an abundance of material and a challenge for future family consumer researchers. In order to meet this challenge, future researchers need feedback from this research to guide them during future revisions and refinements of this model. This section is a summary of the recommendations noted in the discussion of the panel's responses. It also includes several other related recommendations, some stemming from the literature reviewed and others from the opinion of the author. A listing of these recommendations follows:

1. It is suggested that an effort be made to generate constructs uniquely suited to the family consumer behavior discipline instead of relying so heavily upon the practice of conceptual borrowing.
2. Work has to be done developing variables to study group processes instead of using individual variables while attempting to study family decisions.
3. Incorporation of family management concepts into the consumer decision process component of the model's core would provide a means of expanding the conceptual framework for those interested in studying the management of family consumer decisions.
4. Further work is still required to better depict the family member involvement portion of the core so that relationships are more explicit and visible on the diagram and thus more understandable without the extensive written component.
5. Related to the previous suggestion, it is necessary to do more work on diagramming the sets of propositions in the central core so as to clarify those relationships. This could be facilitated by expanding Figure II.2.
6. Including family structure as an internal variable would be a way to overcome the husband/wife dyad limitation on types of families and thus extend the domain of the model.
7. Further work is necessary to clarify the effect of the concepts of *information processing (search)* and *perception (personal factor)* on *problem recognition*.
8. Refinement of the internal concept of *time* and the propositions related to it is recommended.
9. A clarification of the internal variable *personality* and several related subconcepts is recommended, as is the clarification of the internal variable of *perception*.
10. Expansion of the external environment to include natural, physical and technical factors would make the model more meaningful from a systems perspective.

Expanding the concept of environment to include levels and types of environments would provide expanded perspectives for understanding the family decision making process as well as a framework upon which to organize research questions related to ecological systems. An immediate advantage of including levels and types of environments is the lessening of the potential for the internal family system to become a barrier rather than a filter between the core and the external environment.

11. Further work is needed in developing and testing relationships between the family system and family member involvement (F2 propositions).
12. It is suggested that before it is possible to use the model as a basis for empirical research, it must first be refined. Empirical researchers should then initially focus on portions of the model. These conditions would ensure more effective, systematic confirmation/ rejection, evaluation and advancement of the model.
13. The comparison and integration of research findings related to this model will be facilitated if the researcher using the model, utilizes the variables as they are defined instead of deviating from their intended general meaning. Operational definitions included as part of the model should help prevent this. Therefore, a contribution to the refinement of this model would be the operationalization of variables via development of empirical indicators that specify the most useful measure of each concept or variable.
14. This model would qualify as a conceptual framework for research, providing the variables were operationally defined and provided appropriate methods of data analysis allowed meaningful combinations of variables so as to predict and explain family consumer behavior. Thus work is required in conceptualizing multivariate influences.
15. For those future researchers attempting to conduct empirical research based on this model, several methodological procedures merit consideration, thereby providing added assurance that individual efforts will be comparable and integrative.

    Ideally, it is suggested that researchers utilize a representative sample, while designing longitudional studies incorporating both spouses and any relevant children. These researchers should attempt to employ "in situ" data collection tecnhiques, and alsoconsider the impact of environmental and situational conditions in which family decision making takes place. Finally, they should apply multivariate statistical analysis to the dynamic and complex data resultant from studying a broad range of family interactions and consumer decisions.

16. Recognition has to be awarded to the issue of fragmented and non-cumulative research efforts. Therefore, it is hoped that future researchers or theorists will build upon, elaborate and expand this process model of family consumer decisions.

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Appendix A - Reviewer Response Sheet

1. Does this model include what is already known in the field of consumer behavior and family decision making?

2. Does the model adequately reflect the phenonemon of family consumer decision making? Are there a sufficient number of variables and propositions to enable this model to describe and account for the influences on family member involvement during a consumer decision? If not, what additional variables would you suggest be incorporated?

3. Is this model compatible with (ie. does not contradict) previously developed theories/models in the area of family behavior during a consumer purchase decision?

4. Are the propositions organized logically? Does the model exist as a meaningful whole? Are there any gaps in the logical sequence of the model?

5. Does this model represent in a *simple* way, the variables that exist and the relationships among them?

6. Please comment on the adequacy of the documentation provided to support the propositions.

7. Does this model contain variables whose effects are not well described in the model itself?

8. Please comment on the clarity or ambiguity of the variable definitions.

9. In your opinion, are the scope and domain of the model too narrow or too wide? Please elaborate.

10. Does the model provide the means for future empirical testing thereby allowing for its confirmation or rejection (acknowledging that concepts have not yet been given operational definitions)?

11. Would you be able to use this model as a conceptual framework for research?

12. Please comment on the strengths and weaknesses of the model?

13. Criticisms of the earlier consumer decision models cited in the literature review included the following:
    - emphasis on brands rather than products
    - focus on repeat purchase rather than high involvement
    - lack of emphasis on process stages
    - concepts borrowed from other disciplines without evidence of applicability
    - use of individual variables to explain group decision making

    In your opinion, does this model overcome these inadequacies?

14. General comments: